I Population and refugees

Table 1 : Population census

Cathegories of population	Number	Percentage/ total population
Total number of families	3999	
Present number of families	2907	72.7
Number of families before the war	2563	64
Present number of returned families	71	1.8
Number of permanent IDPs	325	8.1
Number of temporary IDPs	130	3.2
Number of families still outside Afghanistan	833	20.8
Number of families in Afghanistan not yet returned to their village	259	6.5

Table 2 : Years of departures and return of refugees

Years of departure and return	Number of villages where the majority of people left or return at that date	Percentage/total number of villages
Departures:		
Never	16	11.4
1977-78	9	6.5
1979-80	73	52.1
1981-82	13	9.3
1983-85	12	8.6
1986-93	17	12.1
Returns:		
Not yet	118	84.3
1984-90	2	1.4
1991-94	11	7.9
1995-96	9	6.4

Table 3: Location of the refugees and IDPs outside and inside Afghanistan

Location	Number of villages with refugees mainly located in the town of the countries mentionned below	%/ total number of villages
Pakistan:		
Nobody	123	87.9
Karachi	1	0.7
Islamabad	1	0.7
Peshawar	1	0.7
Quetta	13	9.3
Para Chenar	1	0.7
Iran:		
Nobody	31	22.1
Araka	2	1.4
Asfahan	5	3.6
Kashan	5	3.6
Mashad	32	22.8
Qoum	15	10.7
Teheran	43	30.8
Shiraz	4	2.9
Zahedan	3	2.1
Afghanistan		
Bamian	3	2.1
Behsud	18	12.9
Herat	4	2.9
Kabul	47	33.6
Nimrouz	1	0.7
Mazar	7	5
Parwan	2	1.4
Nobody	58	41.4

II Agriculture

Table 4: Means of production before the war and now

Means of production	Total for all the villages
Before the war:	
Number of jeribs irrigated before the war	6529.9
Average number of irrigated jeribs per family before the war	2.55
Number of jeribs rainfed before the war	12236.7
Average number of rainfed jeribs per family before the war	4.77
In November 1996	
Number of jeribs irrigated	4182.5
Average number of irrigated jeribs per family	1.43
Number of jeribs rainfed	9384.1
Average number of rainfed jeribs per family	3.22
Number of pair of oxen	1029
Average number of pair of oxen per family	0.35
Number of tractors	0
Number of threshers	0
Number of seed cleaners	0

Table 5: Land ownership

Villages where:	Number of villages	% / total number of villages
All the villagers where owner before the war	49	35
The proportion of land less people is less than before the war	30	21.4
The proportion of land less people is more than before the war	19	13.6
The proportion of land less people is the same as before the war	49	35
There was no land less people in November 1996	42	30

Table 6 : Cereals cultivated before the war and now

Cereals	% of villages before the war			% of villages now		
	First cereal	Second cereal	Third cereal	First cereal	Second cereal	Third cereal
Wheat	**99.3**	0	0	**99.3**	0	0
Barley	0	**97.1**	0	0	**97.9**	0
Maize	0	0	0	0	0	0
No other cereal	0.7	2.9	100	0.7	2.1	100
% villages with 1, 2 or 3 cereals	**99.3**	**97.1**	**0**	**99.3**	**97.9**	**0**

Table 7 : Legumes cultivated before the war and now

Legumes	% of villages before the war			% of villages now		
	First legume	Second legume	Third legume	First legume	Second legume	Third legume
Beans	0	0	0	0	0	0
Broad beans	**50.7**	5.7	4.3	**35.7**	9.3	9.3
Peas	26.4	**43.6**	17.8	30	**39.4**	15.7
Shakhal	13.6	35.7	**34.3**	20	35.7	**26.4**
Calul	0	2.9	2.1	0	2.1	1.4
Lentil	1.4	1.4	12.9	3.6	2.1	14.3
Mung beans	0	0	0	0	0	0
Gram	0	0	0	0	0	0
No other legume	7.9	10.7	28.6	10.7	11.4	25.7
% villages with 1, 2 or 3 legumes	**92.1**	**89.3**	**71.4**	**89.3**	**88.6**	**74.3**

Table 8 : Fodder crops cultivated before the war and now

Fodder crops	% of villages before the war			% of villages now		
	First F. crop	Second F. crop	Third F. crop	First F. crop	Second F. crop	Third F.crop
Alfalfa	**98.6**	0	0	**97.9**	0	0
Beldarghow	0	**51.4**	12.1	0.7	**55.7**	7.9
Clover	0	**16.4**	8.6	0	10.7	**9.3**
No other Fodder crops	1.4	32.2	79.3	1.4	33.6	8.8
% villages with 1, 2 or 3 fodder crops	**98.6**	**67.8**	**20.7**	**97.9**	**66.4**	**100**

Table 9 : Vegetables cultivated before the war and now

Vegetables	**% of villages before the war**			**% of villages now**		
	First veget.	Second veget.	Third veget.	First veget.	Second veget.	Third veget.
Carrot	0	5.8	**20**	0	4.3	**22.1**
Leek	0	0	0	0	0	1.4
Onion	0	0	0	0	0	0
Tomatoes	0	0	0.7	0	0	4.3
Potatoes	**80**	0	0	**80**	0	0
Radish	0	0	0	0	0	0
Squash	0	0	3.6	0	0	8.6
Turnip	0.7	**47.1**	3.6	0	**49.3**	2.9
No other vegetable	19.3	47.1	72.1	20	46.4	60.7
% villages with 1, 2 or 3 vegetables	**80.7**	**52.9**	**27.9**	**80**	**53.7**	**39.3**

Table 10 : Orchards cultivated before the war and now

Orchards	**% of villages before the war**			**% of villages now**		
	First orchard	Second orchard	Third orchard	First orchard	Second orchard	Third orchard
Apple	2.1	1.4	0	7.9	**4.3**	0.7
Almond	0	0	0	0.7		0.7
Apricot	**10**	1.4	0	**10.7**	5	0
Cherry	0	0	0	0	0	0
Mulberry	0.7	**2.9**	1.4		0.7	**2.1**
Plum	0	0	0	0	0	0
Silver berry	0	0	0.7			
Walnut	0	0	0	0	0	0
No other orchards	87.2	94.3	97.9	80.7	90	96.5
% villages with 1, 2 or 3 orchards	**12.8**	**5.7**	**2.1**	**19.3**	**10**	**3.5**

Table 11 : Other crops cultivated before the war and now

Other crops	**% of villages before the war**			**% of villages now**		
	First oth. crop	Second oth. crop	Third oth. Crop	First oth. crop	Second oth. crop	Third oth. crop
No other crops	100	100	100	98	100	100
% villages with 1, 2 or 3 other crops	**0**	**0**	**0**	**0**	**0**	**0**

III Livestock

Table 12: Animal census

	Total for Meher Khana (heads)
Horses	221
Donkeys	3093
Cows	2749
Sheep	33582
Goats	9709
Poultry	10561
% more animal before the war	19.4
% villages with more animals before the war than now	71.4

Table 13: Animal ownership

	% or average for Meher Khana
Animal owners now	98.9
Average number of horses/family	0.076
Average number of donkeys/family	1.06
Average number of cows/family	0.94
Average number of sheep/ family	11.5
Average number of goats/family	3.33
Average number of poultry/family	3.63

Table 14 : Ranking of livestock problems

Problems	% of villages				Ranking
	Priorities n°1	Priorities n°2	Priorities n°3	Priorities n°4	
Breeding	0	28.8	**51.7**	20.1	**3**
Diseases	**87.8**	12.3	0	0	**1**
Housing	0	7.9	28.8	**62.6**	**4**
Nutrition	12.2	**51**	19.5	17.3	**2**

Table 15: Grazing area

	% or average for Meher Khana
Villages with a grazing area	98.5
Average distance from the grazing area	78mn
Villages with a daily grazing area	95.7
Villages with a summer grazing area	7.9
Villages with a water point in the grazing area	70

IV Infrastructures, rehabilitation and construction needs

Table 16: Existing infrastructures

Infrastructures	Total for Meher Khana
Human clinics	0
Schools	4
Wells	111
Water supply	0
Houses	2685
Governmental offices	0

Table 17: Condition of the infrastructures

Infrastructures	Total number in Meher Khana		
	Unaffected	Damaged	Destroyed
Human clinics	0	0	0
Houses	1907	492	283
Schools	0	3	1
Water supply	0	0	0
Wells	10	54	47

Table 18: Construction and reconstruction priorities

Problems	% of villages					Ranking
	Priorities n°1	Priorities n°2	Priorities n°3	Priorities n° 4	Priorities n°5	
Houses	**90**	4.3	0	0	0	**1**
Human clinic	0	0	0	0	0	
Wells	1.4	**23.6**	2.9	0	0	**2**
Schools	2.9	0	0	0	0	**3**
Water supply	0	0	0	0	0	
No problems	5.7	72.1	97.1	0	0	

Table 19: Irrigation infrastructure before the war

Irrigation infrastructures	% for all the villages of Meher khana
Villages with karezes	47.1
Villages with canals	48.6
Villages with springs	96.4
Villages with nawurs	95.7

Table 20: Irrigation infrastructures needs for rehabilitation

Needs for rehabilitation	Number of villages of Meher Khana	% / all the villages of Meher Khana
Inventory of the irrigation problems of the villages:		
Reconstruction of water intake	54	64.3
Reconstruction of other canal structure	47	33.6
Reconstruction of nawur	108	62.2
Reconstruction of Kareze	66	47.1
Main irrigation problem in the village		
Reconstruction of water intake	20	14.3
Reconstruction of other canal structure	33	23.5
Reconstruction of nawur	82	58.6
Reconstruction of Kareze	0	0
Reconstruction of nothing	5	3.6

Table 21: Inventory and condition of the roads

	Number of villages	% for Meher Khana
Villages with a 2x2 road	0	0
Villages with a 4x4 road	6	4.3
Villages with a mule road	134	95.7
Villages with a road in poor condition	138	98.6
Villages with a road in fairly good condition	2	1.4
Villages with road in good condition	0	1

Table 22: Main request of the villages

Request of the villages	Number of village	% Meher Khana
Animal clinic	12	8.6
Human clinic	38	27.2
Rehabilitation of intake	3	2.1
Rehabilitation of canal	1	0.7
Rehabilitation of kareze	8	5.7
Rehabilitation of nawur	3	2.1
Rehabilitation of spring	1	0.7
Road construction	53	37.9
School	14	10
Erosion barrier	3	2.1
Agriculture program	4	2.9

Table 23 : Presence and activities of the NGOs

Names of the NGOs	Activities	% of villages concerned by the help
MADERA	Agriculture program	30.7
AVICEN	Health	1.4

Sub-district : Tagab

Number of villages surveyed: 99
Number of villages not surveyed: 0
Approximate area of the district: 498.5 km2
Date of survey: October-November 1996

Nevertheless, the farmers very often raised the lack of animal power as an important constraint on agriculture in this region. In fact there are important differences at the level of the village. In some villages the number of oxen per jerib is much less than in others. These differences can partially explain the complaints of some farmers. A deeper survey is necessary to find out this problem. As matter of fact several factors must be considered : existence of borrowing or renting of oxen, the availability of pastures for forage, etc.

No machinery like seed cleaners, tractors or threshers were reported except the two threshers and the two tractors provided by MADERA as a demonstration. No rented material seems to be used in this region again except those rented by MADERA.

3.3 Crops and orchards (See annexes pages: 5, 6)

3.3.1 Cereals

Due to the cold climate, there is just one cereal crop cultivated per year on the same land in the whole area.
Now as before the war, wheat is the most important cereal cultivated in these two districts. As the second most common cereal we find barley cultivated in more than 98% of the villages in Behsud II and more than 84% in Behsud I. Furthermore, some farmers especially from Behsud I cultivate maize (10.2% of the villages of Behsud I in November 1996).

3.3.2 Legumes

A lot of differences exist according to the place.
Now as before the war the principals legumes cultivated at the level of Behsud I districts are in order of importance: peas, *shakal*[2] and lentils. In Behsud II we find in order of importance : *shakhal*, peas and lentils. However, a lot of differences exist at the level of the sub-districts and the villages. Thus, the most important legume cultivated in Day Mirdad is the bean. Also, we find the broad bean in Quli khish, Khuna Qala, Meher Khana and Tagab and the lentil in Helmand. No major differences appear between now and before the war regarding the type of legume cultivated and their importance.

3.3.3 Fodder crops

Now as before the war the most important fodder crop is alfalfa (more than 90% for all the villages of the two districts before the war and more than 99% now). After this we find clover (around 15% of all the villages in Behsud II and 37% in Behsud I) and *beldarghow*[3] in Behsud II (12.5%) but only Meher Khana sub-district (55.7% of all the villages as second fodder crop in November 1996). No major differences exist between the sub-districts except for the importance of the cultivation of the clover. It varies from 0% to 50% as second fodder crop. We also did not notice very important differences between now and before the war.

[2] Local legume not surely identified so far

[3] Local fodder crop not identified so far.

I Population and refugees

Table 1 : Population census

Cathegories of population	Number	Percentage/ total population
Total number of families	2954	-
Present number of families	2276	77
Number of families before the war	1964	66.5
Present number of returned families	3	0.1
Number of permanent IDPs	127	4.3
Number of temporary IDPs	63	2.1
Number of families still outside Afghanistan	382	12.9
Number of families in Afghanistan not yet returned to their village	296	10.1

Table 2 : Years of departures and return of refugees

Years of departure and return	Number of villages where the majority of people left or return at that date	Percentage/total number of villages
Departures:		
Never	23	23.2
1979-80	60	60.6
1981-82	6	6.05
1983-86	4	4
1987-93	6	6.05
Returns:		
Not yet	97	98
1995-96	2	2

Table 3: Location of the refugees and IDPs outside and inside Afghanistan

Location	Number of villages with refugees mainly located in the town of the countries mentionned below	%/ total number of villages
Pakistan:		
Nobody	78	78.8
Karachi	1	1
Peshawar	1	1
Quetta	19	19.2
Iran:		
Nobody	40	40.4
Kerma	1	1
Mashad	2	2
Qoum	2	2
Teheran	54	54.6
Afghanistan		
Behsud	6	6.1
Kabul	54	54.5
Mazar	3	3
Nobody	36	36.4

II Agriculture

Table 4: Means of production before the war and now

Means of production	Total for all the villages
Before the war:	
Number of jeribs irrigated before the war	4172
Average number of irrigated jeribs per family before the war	2.1
Number of jeribs rainfed before the war	5722.5
Average number of rainfed jeribs per family before the war	2.9
In November 1996	
Number of jeribs irrigated	3459.75
Average number of irrigated jeribs per family	1.52
Number of jeribs rainfed	5375.8
Average number of rainfed jeribs per family	2.4
Number of pair of oxen	628
Average number of pair of oxen per family	0.3
Number of tractors	0
Number of threshers	0
Number of seed cleaners	0

Table 5: Land ownership

Villages where:	Number of villages	% / total number of villages
All the villagers where owner before the war	64	64.6
The proportion of land less people is less than before the war	12	12.1
The proportion of land less people is more than before the war	1	1
The proportion of land less people is the same as before the war	22	22.2
There was no land less people in November 1996	64	64.7

Table 6 : Cereals cultivated before the war and now

Cereals	**% of villages before the war**			**% of villages now**		
	First cereal	Second cereal	Third cereal	First cereal	Second cereal	Third cereal
Wheat	**98**	0	0	**98**	0	0
Barley	0	**97**	0	0	**97**	0
No other cereal	2	3	100	2	3	100
% villages with 1, 2 or 3 cereals	**98**	**97**	**0**	**98**	**97**	**0**

Table 7 : Legumes cultivated before the war and now

Legumes	**% of villages before the war**			**% of villages now**		
	First legume	Second legume	Third legume	First legume	Second legume	Third legume
Beans	0	0	8.1	0	0	0
Broad beans	**31.3**	6	0	22.2	1	4
Peas	18.2	**37.4**	6.1	19.1	**29.3**	7.1
Shakhal	22.2	18.2	**25.2**	**30.3**	21.2	**17.2**
Calul	3	9.1	8.1	24.4	10.1	9.1
Lentil	19.2	7.1	8.1	0	11.1	3
No other legume	6.1	22.2	44.4	4	27.3	59.6
% villages with 1, 2 or 3 legumes	**93.9**	**77.8**	**55.6**	**96**	**72.7**	**40.4**

Table 8 : Fodder crops cultivated before the war and now

Fodder crops	**% of villages before the war**			**% of villages now**		
	First F. crop	Second F. crop	Third F. crop	First F. crop	Second F. crop	Third F.crop
Alfalfa	**98**	0	0	**98**	**9.1**	0
Clover	0	**11.1**	0	0	0	0
No other Fodder crops	2	88.9	100	2	90.9	100
% villages with 1, 2 or 3 fodder crops	**98**	**11.1**	**0**	**98**	**9.1**	**0**

Table 9 : Vegetables cultivated before the war and now

Vegetables	**% of villages before the war**			**% of villages now**		
	First veget.	Second veget.	Third veget.	First veget.	Second veget.	Third veget.
Carrot	0	8.1	**21.2**	0	9.1	**20.2**
Garlic	0	0	0	0	1	0
Onion	0	1	1	0	2	1
Potatoes	**96**	1	0	**96**	0	0
Tomatoes	0	0	1	0	0	0
Turnip	2	**47.5**	6.1	1	**42.4**	11.1
No other vegetable	2	42.5	70.7	3	45.5	67.7
% villages with 1, 2 or 3 vegetables	**98**	**57.5**	**29.3**	**97**	**54.5**	**32.3**

Table 10 : Orchards cultivated before the war and now

Orchards	**% of villages before the war**			**% of villages now**		
	First orchard	Second orchard	Third orchard	First orchard	Second orchard	Third orchard
Apple	0	**1**	0	**20.2**	0	0
Apricot	**1**	0	0	0	**5**	0
No other orchards	99	99	100	79.8	95	100
% villages with 1, 2 or 3 orchards	**1**	**1**	**0**	**20.2**	**5**	**0**

Table 11 : Other crops cultivated before the war and now

Other crops	**% of villages before the war**			**% of villages now**		
	First oth. crop	Second oth. crop	Third oth. Crop	First oth. crop	Second oth. crop	Third oth. Crop
Forest trees	**39.4**	0	0	**37.4**	0	0
No other crops	60.6	100	100	62.6	100	100
% villages with 1, 2 or 3 other crops	**39.4**	**0**	**0**	**37.4**	**0**	**0**

III Livestock

Table 12: Animal census

	Total for Tagab (heads)
Horses	87
Donkeys	1823
Cows	1448
Sheep	18568
Goats	6016
Poultry	6977
% more animal before the war	11.6
% villages with more animals before the war than now	71.7

Table 13: Animal ownership

	% or average for Tagab
Animal owners now	97.8
Average number of horses/family	0.04
Average number of donkeys/family	0.8
Average number of cows/family	0.6
Average number of sheep/ family	8.2
Average number of goats/family	3.1
Average number of poultry/family	

Table 14 : Ranking of livestock problems

Problems	% of villages				Ranking
	Priorities n°1	Priorities n°2	Priorities n°3	Priorities n°4	
Breeding	0	14.4	**51.5**	34	**3**
Diseases	**79.4**	20.6	0	0	**1**
Housing	0	9.3	36	**54.6**	**4**
Nutrition	20.6	**55.7**	12.5	11.4	**2**

Table 15: Grazing area

	% or average for Tagab
Villages with a grazing area	100%
Average distance from the grazing area	2.1h
Villages with a daily grazing area	100%
Villages with a summer grazing area	0%
Villages with a water point in the grazing area	19.6

IV Infrastructures, rehabilitation and construction needs

Table 16: Existing infrastructures

Infrastructures	Total for Tagab
Human clinics	1
Schools	3
Wells	214
Water supply	0
Houses	1965
Governmental offices	0

Table 17: Condition of the infrastructures

Infrastructures	Total number in Tagab		
	Unaffected	Damaged	Destroyed
Human clinics	0	1	0
Houses	1607	269	89
Schools	1	1	1
Water supply	0	0	0
Wells	126	85	3

Table 18: Construction and reconstruction priorities

Problems	% of villages					Ranking
	Priorities n°1	Priorities n°2	Priorities n°3	Priorities n° 4	Priorities n°5	
Houses	**76.8**	16.2	0	0	0	**1**
Human clinic	1		0	0	0	
Wells	**15.2**	**15.1**	0	0	0	**2**
Schools	2	0	0	0	0	
Water supply	0	0	0	0	0	
No problems	5	**68.7**	100	100	100	

Table 19: Irrigation infrastructure before the war

Irrigation infrastructures	% for all the villages of Tagab
Villages with karezes	34.3
Villages with canals	34.3
Villages with springs	77.8
Villages with nawurs	86.9

Table 20: Irrigation infrastructures needs for rehabilitation

Needs for rehabilitation	Number of villages of Tagab	% / all the villages of Tagab
Inventory of the irrigation problems of the villages:		
Reconstruction of water intake	10	10.1
Reconstruction of other canal structure	15	15.1
Reconstruction of nawur	71	71.7
Reconstruction of Kareze	28	28.3
Main irrigation problem in the village		
Reconstruction of water intake	6	6.1
Reconstruction of other canal structure	9	9.1
Reconstruction of nawur	65	65.6
Reconstruction of Kareze	0	0
Reconstruction of nothing	19	19.2

Table 21: Inventory and condition of the roads

	Number of villages	% for Tagab
Villages with a 2x2 road	0	0
Villages with a 4x4 road	57	57.6
Villages with a mule road	42	42.4
Villages with a road in poor condition	42	42.4
Villages with a road in fairly good condition	57	57.6

Table 22: Main request of the villages

Request of the villages	Number of village	% Tagab
Animal clinic	19	19.2
Flood protection	1	1
Rehabilitation spring	0	0
Human clinic	44	44.5
Rehabilitation of intake	2	2
Rehabilitation of canal	3	3
Rehabilitation of kareze	5	5
Rehabilitation of Nawur	0	0
Road construction	2	2
School	12	12.2
Agriculture program	9	9.1
Nothing	2	2
Rehabilitation of destroyed land	0	0

Table 23 : Presence and activities of the NGOs

Names of the NGOs	Activities	% of villages concerned by the help
MADERA	Agriculture program	47.5
AVICEN	Health	62.6
CCA	?	1

3.3.4 Vegetables

Now as before the war the most important vegetable cultivated is the potatoe (94.6% for the villages of the whole area in November 1996). Differences between the two districts appear at the level of the second most important vegetable cultivated. The carrot is the most important second vegetable in Behsud I (39.2% in 96) and the turnip in Behsud II (32.5% in 96).

Then we find by order of importance:

-In Behsud I in 1996: turnip, onion, radish.

-In Behsud II in 1996: carrot, squash, onion.

As well many differences appear at the level of the sub-districts. The turnip is the most second important crop before the carrot in Quli khish. The onion is the most second important crop before the carrot in Day Mirdad. In Behsud II, the carrot is the most important second crop before the turnip for Markaz e Behud and Helmand sub-districts.

The comparison between before the war and now shows a small increase in the mount of potatoes, a slight decrease in carrots and an slight increase in turnips in the two districts.

3.3.5 Orchards

Before the war as now the most important fruit tree in the two districts is the apple tree (35.4% in Behsud I and 24.1% in Behsud II in november 1996). Then we find the apricot (25.8% in Behsud I and 13.7% in Behsud II at the same date). On average we can say that the orchards are not very developed in the two districts. It represent only 35.8% of all the villages in Behsud I and 30.8% in Behsud II in November 1996. There are some qualitative and quantitative differences at the level of the sub-districts. Thus, there is no apricot at all in Hesa e Awal and Markaz e Behsud, plum only in Hesa e Awal (0.7%), walnut only in Quli khish (2%), cherry only in Quli Khish and mulberry only in Meher Khana.

Furthermore, we observe that the orchards are much more developed in Day Mirdad (92.8 % of the villages in 1996) and Helmand (92.9% in 1996). At the same time they are largely absent from Hesa e Awal sub-district (2.8% in 1996).

There is a significant difference between now and before the war. Today, the orchards are more developed than before. At the level of the whole area we have an increase of 17.8% for the apple trees and 8.9% for apricot trees. As well, we notice the appearance of the almond, the cherry, the plum and the walnut. This development is much more important in Behsud II where the total number of villages with at least one orchard changed from 7.2% before the war to 30.8% in November 1996.

3.3.6 Other crops

The main other crops are sugar beets and forest trees. However for the entire area it does not represent more than 0.5% of the villages for the sugar beet and 2.7% for the forest trees in November 1996. Sugar beet was not cultivated before the war and is only present in Quli Khish and Helmand sub-districts in 1996.

3.4 Livestock (See annexes pages : 7, 8)

3.4.1 Animal census

The total number of animals for the whole area is represented in the table 2 below.

Table 2: Number of animals and percentage/total population of animls in the two districts.

	Horses	Donkeys	Cows	Sheep	Goats	Poultry
Total number	614	26,258	19,528	187,541	66,351	93,912
Percentage/total animal population	0.2	6.7	5	47.5	16.8	23.8

If we do not consider the poultry, the most important animals of the area are the sheep and the goats. This tendency is the same at the level of the district and the sub-district.

According to the farmers, there were 12.5% more animal before the war than now at the level of the two districts. Nevertheless, the lack of animals is much more important for Behsud II (17.6 %) than for Behsud I (7.32%). We notice the same tendency at the level of the sub-districts except for Hesa e Awal where, strangely, there is 1.8% more animals in November 1996 than before the war and for Khuna Qala where it is 4.7%. The sub-district where the decrease of animals is the most noticeable is Helmand with 45.3 % less animal now than before the war. With this survey we can just say that this decrease is probably linked to the war. However it is quite difficult to explain why there are important differences at the level of the sub-districts without a more indepth survey.

3.4.2 Animal ownership

According to the farmers the percentages of animal owners is quite high in the total area. At the level of the district we observe that 99.5% of the population are animal owners in Behsud I and 99.3% in Behsud II. There is no major differences at the level of the sub-districts and the lowest percentage of animal owners is not less than 97.3% (Tagab).

This survey does not show the differences between the animals owners. Unfortunately, we cannot give the differences between the families. Obviously, some have more animals than others.

Nevertheless the average number of animals per family is interesting as well. The results at the level of the two districts are presented in the table n°3 below.

Table n°3: The average number of animals per family in the whole area

Animals	Horses	Donkeys	Cows	Sheep	Goats	Poultry
Average number/ family	0.0145	0.9	0.7	6.75	2.5	3.05

At the level of the districts we observe small differences. In Behsud II, there are more horses per family (0.02), more sheep (6.9) and more poultry (3.2) than in Behsud I (0.009, 5.8 and 2.9). On the other hand there are more goats in Behsud I (2.7 against 2.1 in Behsud II).
At the level of the sub-districts, we also observe differences. The number of sheep per family is more important compare to the average in Tagab (8.2) and Meher Khana (11.5). On the other hand the number of goats per family is quite low in Markaz e Behsud (1.07) and Hesa e Awal (1.33). In these two sub-districts the number of the others animals is not more important and the total number of animals per family is particularly low.

3.4.3 Grazing areas

Ninety nine percent of the villages of the whole area have a grazing area. Among them, 99% have a daily grazing area but 1.8% also have a summer grazing area. The average time necessary to go to the daily grazing area from the village with the flock is around 68 mn for the whole area. At the level of the sub-districts we have a difference from 43mn for Markaz e Behsud and 2.1 hours for Tagab. Seventy percent of the villages have a water point close to the grazing area in Behsud I and 39.7% in Behsud II.

3.4.4 Livestock problems

In each village, the farmers had to prioritise their difficulties among 4 main problems previously identified in another survey. In 88.9% of the villages of the whole area, diseases were recognised as the major constraint on the livestock. After we find the problem of nutrition, breeding and housing. The results are the same for all the sub-districts except for Day Mirdad where the ranking is as follow : disease, breeding, housing and nutrition.
The installation of an animal clinic is the main request of 12% of the villages of the whole area (9.5% for Behsud 1 and 14.5 for Behsud II). This percentage is higher in some sub-districts like Quli Khish (28%, ranked second as the major request of the villages), Tagab (19.2%, ranked second), Khuna Qala (18.6%, ranked second).
The problems of disease and nutrition are linked and have to be considered together. Any veterinary activity (vaccination campaigns, consultations and treatment) will obviously increase the number of animal and the problem of nutrition will become worse. Also, an improvement in the nutrition and housing can reduce the problem of disease.

IV Irrigation and infrastructures

4.1 Irrigation structures and problems (See annexes p: 9, 10)

4.1.1 Irrigation structures

We find 4 kinds of irrigation structures at the level of the whole area: the karezes with wells and canal, the canals with a river intake, springs with canals and the nawur (reservoir for spring or kareze). For the two districts, 27.8% of the villages are using karezes, 45.3% are using a canal (from a river, a spring or a kareze), 81.1% are using a spring and 81.8% have a nawur. Of course one village can have several structures at the same time to irrigate its land.
The karezes are much more developed in Behsud II (41.5% of the villages) than in Behsud I (14%) and springs and nawurs are more usual in Behsud I (92.7%, 93.4%)

than in in Behsud II (69.5%, 70.3%). In some sub-districts like Quli Khish and Hesa e Awal there are no karezes at all whilst this structure is important in Helmand (73.5%). Springs are developed in all the sub-districts (minimum of 62% in Quli Khish and maximum of 99.1 in Khuna Qala). Canals are more developed in Helmand (76.5%) and Quli Khish (74%) than in the others sub-districts. The differences are mainly linked to the difference of availability of water (rivers, springs, underground sheet).

4.1.2 Irrigation problems

Many of the villages recognised that these structures are weak or in poor condition and need improvement. This is especially true for the Nawur and the prioritisation done to characterise the main irrigation problems of the village at the level of the whole area focused on it first (57.7% of the villages) before the water intake (15.6%),and the other canal structures (11.9%). This does not appear when the villagers have to decided what is the request of the community among all the others (health, roads, etc). Only 3.15% of the villages of the entire area choose the nawur as the main rehabilitation priority. Strangely the request for help in the rehabilitation or construction of a water intake, kareze or spring is much more important (5.95%, 5.3% and 9.5% for the total area).

Of course some differences appear in the prioritisation at the level of the districts and the sub-districts according to the particularity of each area (see annexes for more detail).

4.2 <u>Drinking water and health services and problems</u> (See annexes pages: 8, 9, 10)

4.2.1 Drinking water structures and problems

The majority part of the villages (64.3%) are taking drinking water directly from the river or the irrigation structures. Nevertheless some of them have wells or water supply. This is particularly the case for Behsud II where we find 100% of the water supply and 99.4% of the wells existing in the surveyed area. There are only 2 villages among 579 that have water supplies in this district and 284 villages are without wells. Thus the average number of wells per village in Behsud II is 5.9 with a minimum of 1 well per village and a maximum of 30. Among these wells 53.8% are in good condition, 30.3% are damaged and 15.9% are destroyed.
This lack of structures for clean drinking water does not appear as a first priority for the villages. Except in Behsud II where in 6.9 % of the village people say that the reconstruction of the wells is the first priority and 27.9% a second priority.The construction or reconstruction of wells or water supply does not appear as the main request of the villages (just 0.4% of the villages of Behsud I wants a water supply).

4.2.2 Health services and problems

Health services are very weak at the level of the whole area. There were two hospitals in the past which were destroyed during the war and now we find only a few clinics or dispensaries supported by NGOs and some private doctors. In November 1996 only 5 clinics where reported by the people in the two districts (2 in Behsud I and 3 in Behsud II). This is an average of one clinic for 5723.4 families. However, among these 5 clinics 1 is damaged.
The five clinics are located in Day Mirdad, Hesa e Awal, Tagab (the damaged one), Markaz e Behsud (2 clinics). Unfortunately most of these clinics where supported by

AVICEN which has closed recently due to financial problems. Apparently this NGO had 1 clinic in Dahane Garn Ab (Day Mirdad), 1 in Abdara (Hesa e Awal) and 1 in Markaz e Behsud. Two seem to be still working with the support of the local authorities. The last one, Dahane Garm Ab, is closed.
This situation makes the people very anxious and the problem of health appears in the first rank of the main requests of the villages in the two districts (39.5% for Behsud I and 21.4% for Behsud II). The percentage of villages requiring a clinic is even more in some sub-districts like : Hesa e Awal (46.5%), Quli Khish (48%) and Tagab (44.5%).

4.3 Education services (See annexes p 8, 9, 10)
According to the results of the survey, the number of schools in the entire area is very low. In total, no more than 41 schools were reported for the whole area. It means an average of one school for 698 families or 2792 children if we consider an average of 4 children per family. Furthermore only 27 schools are in good condition. The others are damaged or destroyed.
There are important differences between the sub-districts. Thus there is just one school in Khuna Qala for 4900 families when there are 11 schools in Markaz e Behsud for 4806 families. As well there are 11 schools in Helmand but all of them are destroyed or damaged.
The villagers are quite aware of the lack schools and the construction of schools appears as the main request of 18.8% of the villages in Behsud II and 21.2% in Behsud I. It is the most important request behind the health clinic. Nevertheless, in Helmand, Khuna Qala and Day Mirdad it is the main request of most villages of the sub-district (25.5%, 32.4%, 58%).

4.4 Roads (See annexes p: 10)
We distinguished 3 types of roads : the 2x2 road requiring a normal car or track, the 4x4 road requiring a 4 wheel drives car or track and a mule road when it is not usable by any car or track.
At the level of the whole area, only 4.5% of the village have a 2x2 road, 53.9% have a 4x4 road and 41.6% have just a mule road. If the percentage of villages with a 2x2 road is quite similar for the two districts, the villages with mule road is higher in Behsud II (49.8% against 33.4%).
Important differences appear at the level of the sub-districts as well. The number of villages with mule road is higher in Khuna Qala (68.5%) and in Meher Khana (95.7%). On the other hand the villages of Day Mirdad and Markaz e Behsud are less isolated than the other sub-districts with only 11.6% and 11.9% of their villages with only a mule road.
Further more, 45.6% of the villages of the whole area have a road (3 types) in poor condition. We find the same tendency at the level of the district but some differences appear at the level of the sub-district. Ninety two percent and 88.1% of the road in Khuna Qala and Markaz e Behsud are in a fairly good condition whilst 98.6% of the roads in Meher Khana are in a poor condition.
The problem of roads appears to be a major constraint for 7.4% of the villages of the whole area who request help for the roads above all. Logically, this request concerns much many villages in Behsud II (12.9%) than in Behsud I (1.9%). At the level of the sub-district it is particularly requested in Meher Khana (37.9% of the villages, ranked one for the main request of the villages).

V Presence an activities of NGOs (See annexes pages: 10)

The presence and activities of NGOs is very weak in the whole area. In November 1996, the villagers mentioned the presence (now and in the past) of only 6 or 7 NGOs : MADERA, SCA, AVICEN, CAWC, MAPTUR(?), CCA and another unknown NGO funded from Holland . The ACBAR database 1996 mention however 6 NGOs : AVICEN, CAWC, CCA, MADERA, RBS, and SCA.

AVICEN was running health programs but as mentioned above it seems that they have stopped all their activities for financial reasons. In November 1996 17.3% of the villages declared being aided by AVICEN. As the clinics of AVICEN were almost the only ones in the area we do think that the impact was much greater even on the villages quite far from the clinics. In fact the impact shown by the survey probably corresponds more to the impact of the vaccination activities because the villagers were visited by vaccinator teams. According to the survey the impact of AVICEN was quite important in Markaz e Behsud (51.5% of the villages), Tagab (62.6%) and Helmand (21.4%)

MADERA is running agriculture and civil engineering programs. Fourty one percent of the villages of the surveyed area have benefited from the help of MADERA (57% for Behsud II and 25.8 for Behsud II). Some differences appear also at the level of the sub-districts : 47.5% for Tagab, 94% for Quli Khish, 0% for Khuna Qala, 68.1% for Hesa e Awal, 30.7% for Meher Khana, 34.7% for Helmand, 18.6% for Markaz e Behsud and 8.6% for Day Mirdad.

SCA is supporting schools and health projects but the number of villages who mention this NGO is quite low (0.35% of the villages for the two districts) and the NGO is only mentioned in Khuna Qala sub-district. Again we think that this percentage is not representative of the real impact of SCA. First because the villagers tended to mention only the NGOs that came into their village and the impact of a clinic or a school exceeds widely the village in which they are installed. Secondly SCA support teachers jointly with the local authorities and this kind of help is not as visible as the construction of a building or a distribution of seed for the local population.

CAWC is mentioned by 2.9% of the villages of Day Mirdad sub-district and was involved in rug knitting. Also, CCA is mentioned only in Tagab where it is supporting a school.

The NGO called MAPTUR by the local people is not registred in the ACBAR database and is just mentioned in Day Mirdad. It seems to be involved in Health activities (Human clinic).

The unknown NGO funded by Holland supports or supported an animal clinic in Day Mirdad. It could be DCA who had two paravets working in the area until 1995.

We do not forget also that some UN agencies who may work in this area are not reported in this survey.

VI Conclusions

The different tendencies reported in this document show that the people of these two districts faced important difficulties. The war has seriously reduced the capacity of production and improvement of production of the whole area. At same time, despite an important migration outside, the population is 73% more higher than before the war. Even if there is a slight increase in the yield of the cereals compared to before the war thanks to the introduction of improved seeds and chemical fertilizers (when it is

available in the bazar or when NGOs provide it), we can assert that most of the families are in a process of decapitalization.
On the other hand the infrastructures for education and health are very weak at the moment. This lack is considered a major threat by the people and the authorities and will obviously affect the future development of this region.
The support of the NGOs is dangerously weak for such a wide area and large population. Despite Behsud I being included in the 23 target districts of the UN PEACE program, we strongly encourage donors and NGOs to support this area. Such support will be as justified and probably more so than their present interventions in other districts of Afghanistan.
Furthermore we hope that this support will create the conditions suitable for the return of the numerous refugees and IDPs still outside.

Annexes

District : BEHSUD 1

Province : WARDAK

Sub districts : Day Mirdad, Quli Khish, Hesa e Awal

Number of villages surveyed : 263

Number of villages not surveyed : 0

Approximate area of the district : 1354.4 km²

1. Background:

This survey constitutes the first stage in a greater overall scheme. By integrated action in the field, this scheme aims to reinstall IDPs and refugee families and identify the main development problems of the area.

The methodology used for this survey has been adapted from surveys previously conducted by UNDCP in 1995 and MADERA in 1996 in the eastern region, where it has proved very efficient in providing full coverage of a given geographical area in a limited time. In August 1996, it has been tried and tested and adapted to the Hazarajat region.

2. Survey objectives:

The specific objective of this reconnaissance survey aimed to obtain accurate, up-to-date and comprehensive information on the following subjects :

a- Demographical information on current village populations and potential returnees.

b- Major aspects of agriculture, livestock and irrigation, especially with regard to rehabilitation and development requirements.

c- Village infrastructure and rehabilitation needs.

3. Data collection:

3.1. Selection of the survey area:

The survey focused on :

1-the two districts of Besud I and Besud II of Wardak province in Hazarajat, where MADERA has worked for several years.

2- the district of Jalrez of Wardak province, where SOLIDARITES has worked for several years, and Bamyan district in Bamyan province, where SOLIDARITES wants to extend its activities

The surveyed zones was therefore be as follows :

- WARDAK province : Besud I district, Besud II district, and Jalrez district.

- BAMYAN province : Bamyan district.

3.2. Definition and choice of sampling unit:

For this survey, a village was defined as a group of families living in one big house or one group of houses clearly separated from other groups and having a geographically identifiable area of cultivation.

In a large village, it was necessary to use several questionnaires, following the given criteria to distinguish the different groups of families. Names of sub-villages had to be included on the map and on the list.

I Population and refugees

Table 1 : Population census

Cathegories of population	Number	Percentage/ total population
Total number of families	14790	100
Present number of families	10216	69
Number of families before the war	7683	51.9
Present number of returned families	505	3.4
Number of permanent IDPs	406	2.7
Number of temporary IDPs	102	0.7
Number of families still outside Afghanistan	2471	16.7
Number of families in Afghanistan not yet returned to their village	2103	14.2

Table 2 : Years of departures and return of refugees

Years of departure and return	Number of villages where the majority of people left or return at that date	Percentage/total number of villages
Departures:		
Never	20	7.6
1978-79	8	3
1980-82	217	82.5
1983-86	15	5.7
1988-93	3	1.2
Returns:		
Not yet	174	71.6
1981-89	10	4.1
1990-93	49	20.2
1994-96	10	4.1

Table 3: Location of the refugees and IDPs outside and inside Afghanistan

Location	Number of villages with refugees mainly located in the town of the countries mentionned below	%/ total number of villages
Pakistan:		
Nobody	167	63.5
Islamabad	1	0.4
Karachi	16	6.1
Peshawar	32	12.1
Quetta	46	17.5
Para Chanar	1	0.4
Iran:		
Nobody	38	14.4
Asfahan	60	22.8
Bandar Abas	11	4.2
Kerma	2	0.8
Mashad	34	12.9
Qoum	5	1.9
Shiraz	5	1.9
Teheran	61	23.2
Zahedan	47	17.9
Afghanistan		
Nobody	21	8
Bamian	1	0.4
Herat	1	0.4
Jalalabad	1	0.4
Kabul	221	84
Mazar	17	6.4
Pulkumri	1	0.4

II Agriculture

Table 4: Means of production before the war and now

Means of production	Total for all the villages
Before the war:	
Number of jeribs irrigated before the war	20834
Average number of irrigated jeribs per family before the war	2.71
Number of jeribs rainfed before the war	8300
Average number of rainfed jeribs per family before the war	1.08
In November 1996	
Number of jeribs irrigated	18384
Average number of irrigated jeribs per family	1.79
Number of jeribs rainfed	7350
Average number of rainfed jeribs per family	0.72
Number of pair of oxen	1682
Average number of pair of oxen per family	0.16
Number of tractors	1 (MADERA)
Number of threshers	1 (MADERA)
Number of seed cleaners	0

Table 5: Land ownership

Villages where:	Number of villages	% / total number of villages
All the villagers where owner before the war	196	74.5
The proportion of land less people is less than before the war	17	6.5
The proportion of land less people is more than before the war	8	3
The proportion of land less people is the same as before the war	50	19
There was no land less people in November 1996	188	71.5

Table 6 : Cereals cultivated before the war and now

Cereals	% of villages before the war			% of villages now		
	First cereal	Second cereal	Third cereal	First cereal	Second cereal	Third cereal
Wheat	**98.5**	1.5	0	**98.4**	1.5	0
Barley	1.5	**87.4**	3.8	1.6	**84.5**	8
Maize	0	**7.6**	**5**	0	**10.2**	**5.7**
No other cereal	0	3.5	91.2	0	3.8	86.3
% villages with 1, 2 or 3 cereals	**100**	**96.5**	**8.8**	**100**	**96.2**	**13.7**

Table 7 : Legumes cultivated before the war and now

Legumes	% of villages before the war			% of villages now		
	First legume	Second legume	Third legume	First legume	Second legume	Third legume
Beans	21	0.8	0	23.2	0.4	0
Broad beans	18.3	9.5	2.3	14.9	13.3	1.9
Peas	**52.5**	9.9	0.4	**55.6**	15.2	2
Shakhal	1.6	**38.8**	2.7	1.2	**35.7**	6.6
Calul	0	0	1.2	0	0	0.8
Lentil	2	9.2	**43.3**	3.5	13.6	**43.8**
Mung beans	0	0.5	0	0	0.8	0
Gram	0	1.6	0	0	2	0
No other legume	4.6	29.7	50.1	1.6	19	44.9
% villages with 1, 2 or 3 legumes	**95.4**	**70.3**	**49.9**	**98.4**	**81**	**55.1**

Table 8 : Fodder crops cultivated before the war and now

Fodder crops	% of villages before the war			% of villages now		
	First F. crop	Second F. crop	Third F. crop	First F. crop	Second F. crop	Third F.crop
Alfalfa	**92.6**	0	0	**100**	0	0
Clover	0.4	**36.9**	0	0	**38.4**	0
No other Fodder crops	0	63..1	100	0	61.6	100
% villages with 1, 2 or 3 fodder crops	**100**	**36.9**	**0**	**100**	**38.4**	**0**

Table 9 : Vegetables cultivated before the war and now

Vegetables	**% of villages before the war**			**% of villages now**		
	First veget.	Second veget.	Third veget.	First veget.	Second veget.	Third veget.
Carrot	1.1	**41.9**	11.5	0.4	**39.2**	18.7
Garlic	0	0	1.5	0	0	1.1
Onion	0.8	12.9	5.7	0	14	6.8
Potatoes	**77.1**	1.5	2.3	**94.6**	0.8	0
Radish	0	0.4	1.9	0	0.4	2.3
Tomatoes	0	0	1.1	0	0	0.4
Turnip	8.8	13.3	**24**	0.8	25.1	**24.3**
No other vegetable	12.2	30	52	4.2	20.5	46.4
% villages with 1, 2 or 3 vegetables	**87.8**	**70**	**48**	**95.8**	**79.5**	**53.6**

Table 10 : Orchards cultivated before the war and now

Orchards	**% of villages before the war**			**% of villages now**		
	First orchard	Second orchard	Third orchard	First orchard	Second orchard	Third orchard
Apple	**24.3**	0	0	**35.4**	0	0
Apricot	0.4	**22.1**	0	0.4	**25.8**	0.4
Cherry	0	0	0	0	0.4	0
Plum	0	0	0	0	0	**6.8**
Walnut	0	0	0	0	0	0.4
No other orchards	75.3	77.9	100	64.2	73.8	92.4
% villages with 1, 2 or 3 orchards	**24.7**	**22.1**	**0**	**35.8**	**26.2**	**7.6**

Table 11 : Other crops cultivated before the war and now

Other crops	**% of villages before the war**			**% of villages now**		
	First oth. crop	Second oth. crop	Third oth. crop	First oth. crop	Second oth. crop	Third oth. crop
Sugar beet	0	0	0	**0.8**	0	0
No other crops	100	100	100	99.2	100	100
% villages with 1, 2 or 3 other crops	**0**	**0**	**0**	**0.8**	**0**	**0**

III Livestock

Table 12: Animal census

	Total for Behsud 1 (heads)
Horses	100
Donkeys	9588
Cows	7233
Sheep	59742
Goats	27507
Poultry	35090
% more animal before the war	7.32
% villages with more animals than before the war	61.9

Table 13: Animal ownership

	% or average for Behsud 1
Animal owners now	99.5%
Average number of horses/family	0.009
Average number of donkeys/family	0.9
Average number of cows/family	0.7
Average number of sheep/ family	5.8
Average number of goats/family	2.7
Average number of poultry/family	2.9

Table 14 : Ranking of livestock problems

Problems	% of villages				Ranking
	Priorities n°1	Priorities n°2	Priorities n°3	Priorities n°4	
Breeding	0	38.5	**52.9**	8.7	**3**
Diseases	**94.2**	4.6	1.1	0	**1**
Housing	0.8	1.1	26.6	**71.5**	**4**
Nutrition	5	**55.8**	19.4	19.8	**2**

Table 15: Grazing area

	% or average for Behsud 1
Villages with a grazing area	100%
Average distance from the grazing area	76 mn
Villages with a daily grazing area	98.9%
Villages with a summer grazing area	1.1%
Villages with a water point in the grazing area	70.3%

IV Infrastructures, rehabilitation and construction needs

Table 16: Existing infrastructures

Infrastructures	Total for Behsud 1
Human clinics	2
Schools	11
Wells	10
Water supply	0
Houses	7395
Governmental offices	0

Table 17: Condition of the infrastructures

Infrastructures	Total number in Behsud 1		
	Unaffected	Damaged	Destroyed
Human clinics	2	0	0
Houses	6344	845	707
Schools	7	4	0
Water supply	0	0	0
Wells	3	0	7

Table 18: Construction and reconstruction priorities

Problems	% of villages					Ranking
	Priorities n°1	Priorities n°2	Priorities n°3	Priorities n° 4	Priorities n°5	
Houses	**43.4**	0	0.4	**12.4**	2.3	**1**
Human clinic	**15.2**	0	0	0	0	**2**
Wells	0	1.1	0	2.6	**12.3**	**4**
Schools	0	**16**	0	0	0	**2**
Water supply	0	0	**14.6**	0	0.4	**3**
No problems	41.4	82.9	85	85	85	

Table 19: Irrigation infrastructure before the war

Irrigation infrastructures	% for all the villages of Behsud 1
Villages with karezes	14
Villages with canals	49.1
Villages with springs	69.5
Villages with nawurs	70.3

Table 20: Irrigation infrastructures needs for rehabilitation

Needs for rehabilitation	Number of villages of Behsud 1	% / all the villages of Behsud 1
Inventory of the irrigation problems of the villages:		
Reconstruction of water intake	53	20.1
Reconstruction of other canal structure	24	9.2
Reconstruction of nawur	159	60.4
Reconstruction of Kareze	27	10.3
Main irrigation problem in the village		
Reconstruction of water intake	46	17.5
Reconstruction of other canal structure	22	8.4
Reconstruction of nawur	136	51.7
Reconstruction of Kareze	0	0
Reconstruction of nothing	59	22.4

Table 21: Inventory and condition of the roads

	Number of villages	% for Behsud 1
Villages with a 2x2 road	12	4.6
Villages with a 4x4 road	163	62
Villages with a mule road	88	33.4
Villages with a road in poor condition	123	46.8
Villages with a road in fairly good condition	140	53.2

Table 22: Main request of the villages

Request of the villages	Number of village	% Behsud 1
Animal clinic	25	9.5
Flood protection	2	0.8
Rehabilitation spring	33	**12.5**
Human clinic	104	**39.5**
Rehabilitation of intake	17	6.4
Rehabilitation of canal	3	1.1
Rehabilitation of kareze	5	1.9
Rehabilitation of Nawur	12	4.6
Road reconstruction	5	1.9
School	56	**21.2**
Water supply	1	0.4

Table 23 : Presence and activities of the NGOs

Names of the NGOs	Activities	% of villages concerned by the help
MADERA	Civil engineering, agriculture	57
AVICEN	Health	0.7
CAWC	Rug knitting	0.96
MAPTUR	Health	0.46
HOLLAND (?)	Animal clinic	0.46

Sub-district :Day Mirdad

Number of villages surveyed: 69
Number of villages not surveyed: 0
Approximate area of the district: 438.4 km2
Date of survey: October-November 1996

3.3. Choice of interviewees:

Each survey team used one questionnaire format per village. They interviewed a group of 5 to 10 people to obtain answers for the questionnaire.

The interviewees had to live in the village permanently and be well informed about local conditions. The group of interviewees had to be composed of at least 50% of farmers and must include at least 2 village elders.

Survey teams had to note on the questionnaire format whether or not the chief of the village is one of the interviewees.

3.4. Composition of the survey teams:

This survey was conducted by teams of two people: one enumerator and one local guide.

For MADERA, all the enumerators were surveyors of the ACBAR survey unit and work as part of ASA team (Agriculture Survey of Afghanistan) of the Swedish Committee. Each of them had been involved in several surveys in the past and so can be considered as experienced for this type of study.

The local guides for MADERA were provided by the local shura. One guide was selected per area They must all have good knowlege of their area, good contacts with the local population and the capacity to guarantee the security of the surveyor when it was necessary. The survey guides was therefore be helpful in assisting the enumerators with local contacts and knowledge

For MADERA, as there was 8 sub-districts or areas to survey and one survey team for each area, there will be a total of 8 enumerators who were accompanied by 8 local guides.

Prior to survey implementation, all enumerators were trained for a period of 3 to 4 days. Enumerators and local guides were debriefed in MADERA's Besud I center and Jalrez SOLIDARITIES's center following their return to complement the collected data by additional information pertaining to the district surveyed.

3.5. Supervision and follow-up:

For MADERA's staff, the supervision and co-ordination of the work of the survey teams were implemented by the survey-coordinator of ACBAR. He was responsible to ACBAR for checking in the field the quality of the survey field work and of the information collected.

The monitoring was implemented by two MADERA's monitors and two SOLIDARITES's survey monitors. They were ensuring that the field work is implemented following the defined methodology.

3.6. Data collection tools:

Each survey team was provided with survey forms and a map of the district assigned showing the villages to be visited. In addition, each team received a compass and a notebook.

The questionnaire format was prepared in English and translated into dari by MADERA's staff.

The sub district map and the sub district list were used for identifying each surveyed village and for marking villages not previously indicated.

Enumerators were using notebooks to get additional information for debriefing purposes and to help in the preparation of survey maps.

I Population and refugees

Table 1 : Population census

Cathegories of population	Number	Percentage/ total population
Total number of families	5055	-
Present number of families	3979	72.8
Number of families before the war	3043	60.2
Present number of returned families	306	6
Number of permanent IDPs	89	1.8
Number of temporary IDPs	69	1.4
Number of families still outside Afghanistan	613	12.1
Number of families in Afghanistan not yet returned to their village	463	9.2

Table 2 : Years of departures and return of refugees

Years of departure and return	Number of villages where the majority of people left or return at that date	Percentage/total number of villages
Departures:		
Never	0	0
1978-79	8	11.6
1980-82	56	81.2
1983-86	5	7.2
Returns:		
Not yet	21	30.4
1985-89	2	2.9
1990-93	40	58
1994-96	6	8.7

Table 3: Location of the refugees and IDPs outside and inside Afghanistan

Location	Number of villages with refugees mainly located in the town of the countries mentionned below	%/ total number of villages
Pakistan:		
Nobody	59	85.5
Karachi	1	1.4
Peshawar	5	7.3
Quetta	4	5.8
Iran:		
Nobody	7	10.2
Asfahan	47	68.2
Bandar Abas	1	1.4
Mashad	1	1.4
Shiraz	2	2.9
Teheran	11	15.9
Afghanistan		
Kabul	64	92.8
Mazar	2	2.9
Nobody	3	4.3

II Agriculture

Table 4: Means of production before the war and now

Means of production	Total for all the villages
Before the war:	
Number of jeribs irrigated before the war	4919.5
Average number of irrigated jeribs per family before the war	1.6
Number of jeribs rainfed before the war	3292.6
Average number of rainfed jeribs per family before the war	1.1
In November 1996	
Number of jeribs irrigated	3962.5
Average number of irrigated jeribs per family	0.99
Number of jeribs rainfed	2618.4
Average number of rainfed jeribs per family	0.65
Number of pair of oxen	752
Average number of pair of oxen per family	0.2
Number of tractors	0
Number of threshers	0
Number of seed cleaners	0

Table 5: Land ownership

Villages where:	Number of villages	% / total number of villages
All the villagers where owner before the war	26	37.8
The proportion of land less people is less than before the war	5	7.2
The proportion of land less people is more than before the war	3	4.3
The proportion of land less people is the same as before the war	36	52.2
There was no land less people in November 1996	25	36.2

Table 6 : Cereals cultivated before the war and now

Cereals	% of villages before the war			% of villages now		
	First cereal	Second cereal	Third cereal	First cereal	Second cereal	Third cereal
Wheat	**98.6**	1.4	0	**98.6**	1.45	0
Barley	1.4	**68.2**	14.5	1.4	**58**	**30.4**
Maize	0	29	**18.8**	0	39.1	21.7
No other cereal	0	1.4	66.7	0	1.45	47.9
% villages with 1, 2 or 3 cereals	**100**	**98.6**	**33.3**	**100**	**98.55**	**52.1**

Table 7 : Legumes cultivated before the war and now

Legumes	% of villages before the war			% of villages now		
	First legume	Second legume	Third legume	First legume	Second legume	Third legume
Beans	**79.7**	2.9	0	**88.4**	1.4	0
Broad beans	1.4	7.3	4.4	1.4	5.8	4.3
Peas	0	**23.2**	1.4	0	**23.2**	1.4
Shakhal	0	0	0	0	0	0
Calul	0	0	0	0	0	0
Lentil	7.3	11.6	**13**	7.3	17.4	**20.2**
Mung beans	0	1.4	0	0	2.9	0
Gram	0	5.8	0	0	7.3	0
No other legume	11.6	47.8	81.2	2.9	42	73.9
% villages with 1, 2 or 3 legumes	**88.4**	**52.2**	**18.8**	**97.1**	**58**	**26.1**

Table 8 : Fodder crops cultivated before the war and now

Fodder crops	% of villages before the war			% of villages now		
	First F. crop	Second F. crop	Third F. crop	First F. crop	Second F. crop	Third F.crop
Alfalfa	**98.6**	0	0	**100**	0	0
Clover	1.4	**75.4**	0	0	**75.4**	0
No other Fodder crops	0	24.6	100	0	24.6	100
% villages with 1, 2 or 3 fodder crops	**100**	75.4	**0**	**100**	**75.4**	**0**

Table 9 : Vegetables cultivated before the war and now

Vegetables	% of villages before the war			% of villages now		
	First veget.	Second veget.	Third veget.	First veget.	Second veget.	Third veget.
Carrot	0	17.4	**30.4**	0	20.3	**27.5**
Garlic	0	0	5.8	0	0	4.4
Onion	2.9	**49.4**	21.7	0	**53.6**	26
Potatoes	**89.8**	2.9	0	**98.6**	0	0
Radish	0	1.4	7.3	0	1.4	8.7
Tomatoes	0	0	4.4	0	0	1.4
Turnip	0	18.8	8.7	0	17.4	8.7
No other vegetable	7.3	10.1	21.7	1.4	7.3	23.2
% villages with 1, 2 or 3 vegetables	**92.7**	**89.9**	**78.3**	**98.6**	**92.7**	**76.8**

Table 10 : Orchards cultivated before the war and now

Orchards	% of villages before the war			% of villages now		
	First orchard	Second orchard	Third orchard	First orchard	Second orchard	Third orchard
Apple	**85.5**	0	0	**92.8**	0	0
Apricot	0	**78.3**	0	0	**76.8**	1.4
Cherry	0	0	0	0	0	0
Plum	0	0	**26.1**	0	1.4	**26.1**
No other orchards	14.5	21.7	73.9	1.2	21.8	72.5
% villages with 1, 2 or 3 orchards	**85.5**	**78.3**	**26.1**	**92.8**	**78.2**	**27.3**

Table 11 : Other crops cultivated before the war and now

Other crops	% of villages before the war			% of villages now		
	First oth. Crop	Second oth. crop	Third oth. crop	First oth. crop	Second oth. Crop	Third oth. Crop
No other crops	100	100	100	100	100	100
% villages with 1, 2 or 3 other crops	**0**	**0**	**0**	**0**	**0**	**0**

III Livestock

Table 12: Animal census

	Total for Day Mirdad (heads)
Horses	34
Donkeys	3289
Cows	3298
Sheep	25737
Goats	14099
Poultry	21415
% more animal before the war	17.7
% villages with more animals before the war than now	92.7

Table 13: Animal ownership

	% or average for Day Mirdad
Animal owners now	100
Average number of horses/family	0.008
Average number of donkeys/family	0.8
Average number of cows/family	0.8
Average number of sheep/ family	6.5
Average number of goats/family	3.5
Average number of poultry/family	5.4

Table 14 : Ranking of livestock problems

Problems	% of villages				Ranking
	Priorities n°1	Priorities n°2	Priorities n°3	Priorities n°4	
Breeding	0	**81.2**	7.2	11.6	**2**
Diseases	**100**	0	0	0	**1**
Housing	0	0	**78.3**	**21.7**	**3**
Nutrition	0	18.8	14.5	66.7	**4**

Table 15: Grazing area

	% or average for Day Mirdad
Villages with a grazing area	100
Average distance from the grazing area	72 mn
Villages with a daily grazing area	98.6
Villages with a summer grazing area	1.4
Villages with a water point in the grazing area	100

IV Infrastructures, rehabilitation and construction needs

Table 16: Existing infrastructures

Infrastructures	Total for Day Mirdad
Human clinics	1
Schools	4
Wells	0
Water supply	10
Houses	3109
Governmental offices	0

Table 17: Condition of the infrastructures

Infrastructures	Total number in Day Mirdad		
	Unaffected	Damaged	Destroyed
Human clinics	1	0	0
Houses	2290	493	326
Schools	3	1	0
Water supply	3	0	7
Wells	0	0	0

Table 18: Construction and reconstruction priorities

Problems	% of villages					Ranking
	Priorities n°1	Priorities n°2	Priorities n°3	Priorities n° 4	Priorities n°5	
Houses	**95.6**	0	0	0	0	**1**
Human clinic	0	0	0	0	0	
Wells	0	**4.4**	0	0	0	**2**
Schools	0	1.4	0	0	0	**3**
Water supply	0	0	0	0	0	
No problems	4.4	94.2	100	100	100	

Table 19: Irrigation infrastructure before the war

Irrigation infrastructures	% for all the villages of Day Mirdad
Villages with karezes	53.6
Villages with canals	52.2
Villages with springs	72.5
Villages with nawurs	78.3

Table 20: Irrigation infrastructures needs for rehabilitation

Needs for rehabilitation	Number of villages of Day Mirdad	% / all the villages of Day Mirdad
Inventory of the irrigation problems of the villages:		
Reconstruction of water intake	17	24.6
Reconstruction of other canal structure	1	1.4
Reconstruction of nawur	41	59.4
Reconstruction of Kareze	31	44.9
Main irrigation problem in the village		
Reconstruction of water intake	14	20.3
Reconstruction of other canal structure	0	0
Reconstruction of nawur	32	46.4
Reconstruction of Kareze	0	0
Reconstruction of nothing	23	33.3

Table 21: Inventory and condition of the roads

	Number of villages	% for Day mirdad
Villages with a 2x2 road	2	2.9
Villages with a 4x4 road	59	85.5
Villages with a mule road	8	11.6
Villages with a road in poor condition	21	30.4
Villages with a road in fairly good condition	48	69.6

Table 22: Main request of the villages

Request of the villages	Number of village	% Day Mirdad
Animal clinic	7	10.2
Human clinic	13	18.8
Rehabilitation of intake	3	4.4
Rehabilitation of kareze wells	4	5.8
Rehabilitation of Nawur	1	1.4
Road reconstruction		
School	40	58
Water supply	1	1.4

Table 23 : Presence and activities of the NGOs

Names of the NGOs	Activities	% of villages concerned by the help
MADERA	Agriculture program	8.6
AVICEN	Human clinic	1.4
CAWC	Rug knitting	2.9
HOLLAND (?)	Animal clinic	1.4
MAPTVR	Human clinic	1.4

Sub-district : Quli Khish

Number of villages surveyed: 50
Number of villages not surveyed: 0
Approximate area of the district: 286.1 km2
Date of survey: October-November 1996

3.7. Instructions for data collection and distribution of responsibilities:

In order to clarify the responsibilities of each individual and to avoid overlapping, general instructions were issued to all survey staff.

General instructions :

- The farmers had to be interviewed by enumerators in accordance with the questionnaire.

- The enumerator of ACBAR had to be accompanied by a local guide to every village in each sub district.

- Every village in the sub-district was to be surveyed and one questionnaire had to be filled in for each village.

- Group interviews had to be conducted with five to ten readily available farmers, who were familiar with the village.

- The enumerators and field monitors had to be provided with sub-district maps, a list of villages and a compass.

Instruction to the survey team :

Each enumerator and local guide was instructed to:

- Before beginning the interviews, familiarise himself thoroughly with all the villages listed and identified on the respective sub-district maps and lists.

- Before beginning each interview, confirm that each village is on the survey map and list.

- Any villages missing from the map and list must be added in their proper geographical location on the map and list with their popular or local name.

- In each village, walk through areas used for agricultural activities and estimate the total cultivated area and the total irrigated area.

- Explain to interviewed farmers the purpose of the survey. Make clear that the survey does not in any way constitute a commitment from MADERA to work in the village in the future.

- Use a "soft" approach and have a low profile when interviewing farmers. Adopt critical behaviour when contradictions or inconsistencies appear in the answers or when the answers to the same question differ very strongly among the group of interviewees.

- Record additional information of interest pertaining to the individual villages under survey in a notebook for debriefing purposes.

Instructions given to the survey coordinator :

- Be based in the MADERA main office in Besud I and in the SOLIDARITES center in Jalrez.

- Coordinate all the enumerator field activities.

- Report the updated progress of the field survey to the survey field monitors.

- Record the progress of each survey team and ensure that every village is marked by the enumerator on the survey map.

_- Collect the completed questionnaires regularly and make them available to the field monitors.

I Population and refugees

Table 1 : Population census

Cathegories of population	Number	Percentage/ total population
Total number of families	3278	
Present number of families	1984	60.5
Number of families before the war	1465	44.7
Present number of returned families	0	0
Number of permanent IDPs	38	1.2
Number of temporary IDPs	7	0.2
Number of families still outside Afghanistan	856	26.1
Number of families in Afghanistan not yet returned to their village	438	13.4

Table 2 : Years of departures and return of refugees

Years of departure and return	Number of villages where the majority of people left or return at that date	Percentage/total number of villages
Departures:		
Never	1	2
1980-82	47	94
1983	2	4
Returns:		
Not yet	50	100

Table 3: Location of the refugees and IDPs outside and inside Afghanistan

Location	Number of villages with refugees mainly located in the town of the countries mentionned below	%/ total number of villages
Pakistan:		
Nobody	8	16
Peshawar	1	2
Quetta	40	80
Para Chenar	1	2
Iran:		
Nobody	1	2
Asfahan	4	8
Bandar Abas	10	20
Qoum	4	8
Teheran	31	62
Afghanistan		
Kabul	39	78
Mazar	9	18
Nobody	2	4

II Agriculture

Table 4: Means of production before the war and now

Means of production	Total for all the villages
Before the war:	
Number of jeribs irrigated before the war	1783.4
Average number of irrigated jeribs per family before the war	1.2
Number of jeribs rainfed before the war	145.5
Average number of rainfed jeribs per family before the war	0.099
In November 1996	
Number of jeribs irrigated	1762.9
Average number of irrigated jeribs per family	0.88
Number of jeribs rainfed	136.5
Average number of rainfed jeribs per family	0.068
Number of pair of oxen	232
Average number of pair of oxen per family	0.11
Number of tractors	0
Number of threshers	0
Number of seed cleaners	0

Table 5: Land ownership

Villages where:	Number of villages	% / total number of villages
All the villagers where owner before the war	44	88
The proportion of land less people is less than before the war	6	12
The proportion of land less people is more than before the war	4	8
The proportion of land less people is the same as before the war	1	2
There was no land less people in November 1996	39	78

Table 6 : Cereals cultivated before the war and now

Cereals	**% of villages before the war**			**% of villages now**		
	First cereal	Second cereal	Third cereal	First cereal	Second cereal	Third cereal
Wheat	**94**	6	0	**94**	6	0
Barley	6	**94**	0	6	**94**	0
Maize	0	0	0	0	0	0
No other cereal	0	0	100	0	0	100
% villages with 1, 2 or 3 cereals	**100**	**100**	**0**	**100**	**100**	**0**

Table 7 : Legumes cultivated before the war and now

Legumes	**% of villages before the war**			**% of villages now**		
	First legume	Second legume	Third legume	First legume	Second legume	Third legume
Beans	0	0	0	0	0	0
Broad beans	**90**	0	0	**76**	18	0
Peas	4	**16**	0	16	**48**	**8**
Shakhal	0	6	0	0	**4**	4
Calul	0		0	0	0	0
Lentil	0	2	**2**	6	2	6
Mung beans	0		0	0	0	0
Gram	0		0	0	0	0
No other legume	6	76	98	2	28	82
% villages with 1, 2 or 3 legumes	**94**	**24**	**2**	**98**	**72**	**18**

Table 8 : Fodder crops cultivated before the war and now

Fodder crops	**% of villages before the war**			**% of villages now**		
	First F. crop	Second F. crop	Third F. crop	First F. crop	Second F. crop	Third F.crop
Alfalfa	**100**	0	0	**100**	0	0
Clover	0	**40**	0	0	**50**	0
No other Fodder crops	0	60	100	0	0	100
% villages with 1, 2 or 3 fodder crops	**100**	**40**	**0**	**100**	**50**	**0**

Table 9 : Vegetables cultivated before the war and now

Vegetables	**% of villages before the war**			**% of villages now**		
	First veget.	Second veget.	Third veget.	First veget.	Second veget.	Third veget.
Carrot	6	**22**	2	0	**14**	42
Garlic	0	0	0	0	0	0
Onion	0	0	0	0	0	0
Potatoes	12	4	**12**	**96**	4	0
Radish	0	0	0	0	0	0
Squash	0	0	0	0	0	0
Turnip	**46**	6	2	4	66	**10**
No other vegetable	36	68	86	0	16	48
% villages with 1, 2 or 3 vegetables	**64**	**32**	**14**	**100**	**84**	**52**

Table 10 : Orchards cultivated before the war and now

Orchards	**% of villages before the war**			**% of villages now**		
	First orchard	Second orchard	Third orchard	First orchard	Second orchard	Third orchard
Apple	**8**	0	0	**52**	0	0
Apricot	2	**8**	0	0	**30**	0
Cherry	0	0	0	0	2	0
Plum	0	0	0	0	0	0
Walnut	0	0	0	0	0	**2**
No other orchards	90	92	100	48	68	98
% villages with 1, 2 or 3 orchards	**10**	**8**	**0**	**52**	**32**	**0**

Table 11 : Other crops cultivated before the war and now

Other crops	**% of villages before the war**			**% of villages now**		
	First oth. crop	Second oth. crop	Third oth. Crop	First oth. crop	Second oth. crop	Third oth. Crop
Sugar beet	0	0	0	**4**	0	0
No other crops	100	100	100	96	100	100
% villages with 1, 2 or 3 other crops	**0**	**0**	**0**	**4**	**0**	**0**

III Livestock

Table 12: Animal census

	Total for Quli khish (heads)
Horses	16
Donkeys	1814
Cows	1393
Sheep	11490
Goats	7735
Poultry	6705
% more animal before the war	19.8
% villages with more animals before the war than now	100

Table 13: Animal ownership

	% or average for Quli Khish
Animal owners now	99.65
Average number of horses/family	0.008
Average number of donkeys/family	0.91
Average number of cows/family	0.7
Average number of sheep/ family	5.79
Average number of goats/family	3.89
Average number of poultry/family	3.37

Table 14 : Ranking of livestock problems

Problems	% of villages				Ranking
	Priorities n°1	Priorities n°2	Priorities n°3	Priorities n°4	
Breeding	0	38	**62**	0	**3**
Diseases	**100**	0	0	0	**1**
Housing	0	0	6	**94**	**4**
Nutrition	0	**62**	32	6	**2**

Table 15: Grazing area

	% or average for Quli % or average for Quli Khish
Villages with a grazing area	100
Average distance from the grazing area	71mn
Villages with a daily grazing area	96
Villages with a summer grazing area	4
Villages with a water point in the grazing area	98

IV Infrastructures, rehabilitation and construction needs

Table 16: Existing infrastructures

Infrastructures	Total for Quli Khish
Human clinics	0
Schools	4
Wells	0
Water supply	0
Houses	1410
Governmental offices	0

Table 17: Condition of the infrastructures

Infrastructures	Total number in Quili Khish		
	Unaffected	Damaged	Destroyed
Human clinics	0	0	0
Houses	1178	83	149
Schools	3	1	0
Water supply	0	0	0
Wells	0	0	0

Table 18: Construction and reconstruction priorities

Problems	% of villages					Ranking
	Priorities n°1	Priorities n°2	Priorities n°3	Priorities n° 4	Priorities n°5	
Houses	**66**	0	0	0	0	**1**
Human clinic	0	0	0	0	0	
Wells	0	**0**	0	0	0	
Schools	0	2	0	0	0	**2**
Water supply	0	0	0	0	0	
No problems	44	98	100	100	100	

Table 19: Irrigation infrastructure before the war

Irrigation infrastructures	% for all the villages of Quli Khish
Villages with karezes	0
Villages with canals	74
Villages with springs	62
Villages with nawurs	40

Table 20: Irrigation infrastructures needs for rehabilitation

Needs for rehabilitation	Number of villages of Quli Khish	% / all the villages of Quli Khish
Inventory of the irrigation problems of the villages:		
Reconstruction of water intake	1	2
Reconstruction of other canal structure	5	10
Reconstruction of nawur	15	30
Reconstruction of Kareze	0	0
Main irrigation problem in the village		
Reconstruction of water intake	0	0
Reconstruction of other canal structure	5	10
Reconstruction of nawur	15	30
Reconstruction of Kareze	0	0
Reconstruction of nothing	30	60

Table 21: Inventory and condition of the roads

	Number of villages	% for Quli Khish
Villages with a 2x2 road	8	16
Villages with a 4x4 road	22	44
Villages with a mule road	20	40
Villages with a road in poor condition	20	40
Villages with a road in fairly good condition	30	60
Villages with road in good condition	0	0

Table 22: Main request of the villages

Request of the villages	Number of village	% Quli Khish
Animal clinic	14	28
Human clinic	24	48
Rehabilitation of intake	0	0
Rehabilitation of canal	0	0
Rehabilitation of kareze	0	0
Road construction	2	4
School	10	20
Agriculture program	0	0

Table 23 : Presence and activities of the NGOs

Names of the NGOs	Activities	% of villages concerned by the help
MADERA	Agriculture program	94

Sub-district :Hesa e Awal

Number of villages surveyed: 144
Number of villages not surveyed: 0
Approximate area of the district: 630 km2
Date of survey: October-November 1996

- Participate in debriefing of the survey teams after completion of their survey activities.

- Write up a narrative report on the whole process of the survey (including the training and the debriefing).

Instructions for field monitors :

- Supervise the work of 4 survey teams.

- Accompany each survey team to at least 4 villages and ensure personally that each team is working according to instructions.

- On the spot, check at least 10% of the completed questionnaires in each district. This requires personally going to villages selected by the monitor and confirming the data collected. The villages selected must be spread all over the district.

- Participate in the debriefing of each survey team.

- Make a brief report for each village he visits when he accompanies the survey teams or when he verifies the data collected.

4. Data processing:

Completed questionnaires were checked for accuracy before computer data entries were made. The data collected were entered on database format for processing and analysis (Access data base). The data entries were also checked before processing and analysis.

The survey maps amended by the teams were processed. Upgraded maps showing the main trends were produced.

5. Survey and methodology limitations:

Inevitably, all villages and agricultural land in the survey methodology were subject to minor errors. These occured because :

- The results were based on estimation by interviewees, not from census or direct measurement. However enumerators were experienced in estimating agricultural land and will cross check thoroughly.

- Group interviews was useful method of conducting large scale surveys but did not permit all members of the group to express their views equally.

- The methodology adopted excluded the views of women. However, this was unavoidable as cultural constraints mean female enumerators were not available.

In the light of the above limitations, a certain margin of error was expected. However by proper training of experienced enumerators, and by strict monitoring and cross-checking it was anticipated that this margin remained within acceptable limits.

I Population and refugees

Table 1 : Population census

Cathegories of population	Number	Percentage/ total population
Total number of families	6458	
Present number of families	4254	65.9
Number of families before the war	3175	49.2
Present number of returned families	199	3.1
Number of permanent IDPs	279	4.3
Number of temporary IDPs	26	0.4
Number of families still outside Afghanistan	1002	15.5
Number of families in Afghanistan not yet returned to their village	1202	18.6

Table 2 : Years of departures and return of refugees

Years of departure and return	Number of villages where the majority of people left or return at that date	Percentage/total number of villages
Departures:		
Never	19	13.3
1980-82	114	79.2
1983-84	4	2.7
1985-93	7	4.8
Returns:		
Not yet	122	84.7
1981-89	8	5.6
1991-93	9	6.2
1994-95	5	3.5

<u>Table 3</u>: Location of the refugees and IDPs outside and inside Afghanistan

Location	Number of villages with refugees mainly located in the town of the countries mentionned below	%/ total number of villages
Pakistan:		
Nobody	100	69.4
Islamabad	1	0.7
Karachi	15	10.5
Peshawar	26	18
Quetta	2	1.4
Iran:		
Nobody	30	20.8
Asfahan	9	6.3
Kerman	2	1.4
Mashad	33	22.9
Qoum	1	0.7
Shiraz	3	2.1
Teheran	19	13.2
Zahedan	47	32.6
Afghanistan		
Bamian	1	0.7
Herat	1	0.7
Jalalabad	1	0.7
Kabul	118	81.9
Mazar	6	4.2
Nobody	16	11.1
Pulikhumi	1	0.7

II Agriculture

Table 4: Means of production before the war and now

Means of production	Total for all the villages
Before the war:	
Number of jeribs irrigated before the war	5692
Average number of irrigated jeribs per family before the war	1.8
Number of jeribs rainfed before the war	4861.9
Average number of rainfed jeribs per family before the war	1.53
In November 1996	
Number of jeribs irrigated	4219
Average number of irrigated jeribs per family	0.99
Number of jeribs rainfed	4595.2
Average number of rainfed jeribs per family	1.08
Number of pair of oxen	698.5
Average number of pair of oxen per family	0.16
Number of tractors	1 (MADERA)
Number of threshers	1 (MADERA)
Number of seed cleaners	0

Table 5: Land ownership

Villages where:	Number of villages	% / total number of villages
All the villagers where owner before the war	125	86.8
The proportion of land less people is less than before the war	6	4.2
The proportion of land less people is more than before the war	1	0.7
The proportion of land less people is the same as before the war	13	9
There was no land less people in November 1996	124	86.1

Table 6 : Cereals cultivated before the war and now

Cereals	% of villages before the war			% of villages now		
	First cereal	Second cereal	Third cereal	First cereal	Second cereal	Third cereal
Wheat	**100**	0	0	**100**	0	0
Barley	0	**94.4**	0	0	**93.8**	0
Maize	0	0	0	0	0	0
No other cereal	0	5.6	100	0	6.2	100
% villages with 1, 2 or 3 cereals	**100**	**94.4**	**0**	**100**	**93.8**	**0**

Table 7 : Legumes cultivated before the war and now

Legumes	% of villages before the war			% of villages now		
	First legume	Second legume	Third legume	First legume	Second legume	Third legume
Beans	0	0	0	0	0	0
Broad beans	1.4	13.9	2.1	0	15.3	1.4
Peas	**94.4**	1.4	0	**95.8**	0	0
Shakhal	2.8	**68.7**	4.9	2.1	**63.9**	10.4
Calul	0	0	2.1	0	0	1.4
Lentil	0	11.1	**72.2**	0.7	15.9	**68.8**
Mung beans	0	0	0	0	0	0
Gram	0	0	0	0	0	0
No other legume	1.4	4.9	18.7	1.4	4.9	18
% villages with 1, 2 or 3 legumes	**98.6**	**95.1**	**81.3**	**98.6**	**95.1**	**82**

Table 8 : Fodder crops cultivated before the war and now

Fodder crops	% of villages before the war			% of villages now		
	First F. crop	Second F. crop	Third F. crop	First F. crop	Second F. crop	Third F.crop
Alfalfa	**100**	0	0	**100**	0	0
Clover	0	**17.4**	0	0	**17.4**	0
No other Fodder crops	0	82.6	100	0	82.6	100
% villages with 1, 2 or 3 fodder crops	**100**	**17.4**	**0**	**100**	**17.4**	**0**

Table 9 : Vegetables cultivated before the war and now

Vegetables	**% of villages before the war**			**% of villages now**		
	First veget.	Second veget.	Third veget.	First veget.	Second veget.	Third veget.
Carrot	0	**60.4**	5.5	0.7	**56.9**	6.3
Garlic	0	0	0	0	0	0
Onion	0	0	0	0	0	0
Potatoes	**93.7**	0	0	**92.4**	0	0
Radish	0	0	0	0	0	0
Squash	0	0	0	0	0	0
Turnip	0	13.2	**38.9**	0	14.6	**36.8**
No other vegetable	6.3	26.4	55.6	6.9	28.5	56.9
% villages with 1, 2 or 3 vegetables	**93.7**	**73.6**	**44.4**	**93.1**	**71.5**	**43.1**

Table 10 : Orchards cultivated before the war and now

Orchards	**% of villages before the war**			**% of villages now**		
	First orchard	Second orchard	Third orchard	First orchard	Second orchard	Third orchard
Apple	**0.7**	0	0	**2.1**	0	0
Apricot	0	0	0	0.7	0	0
Cherry	0	0	0	0	0	0
Plum	0	0	0	0	**0.7**	0
Walnut	0	0	0	0	0	0
No other orchards	99.3	100	100	97.2	99.3	100
% villages with 1, 2 or 3 orchards	**0.7**	**0**	**0**	**2.8**	**0.7**	**0**

Table 11 : Other crops cultivated before the war and now

Other crops	**% of villages before the war**			**% of villages now**		
	First oth. crop	Second oth. crop	Third oth. Crop	First oth. crop	Second oth. crop	Third oth. Crop
No other crops	100	100	100	100	100	100
% villages with 1, 2 or 3 other crops	**0**	**0**	**0**	**0**	**0**	**0**

III Livestock

Table 12: Animal census

	Total for Hesa e Awal (heads)
Horses	50
Donkeys	4485
Cows	2542
Sheep	22517
Goats	5673
Poultry	6970
% less animal before the war	1.8%
% villages with less animals before the war than now	66%

Table 13: Animal ownership

	% or average for Hesa e Awal
Animal owners now	99.25
Average number of horses/family	0.011
Average number of donkeys/family	1.05
Average number of cows/family	0.6
Average number of sheep/ family	5.29
Average number of goats/family	1.33
Average number of poultry/family	1.63

Table 14 : Ranking of livestock problems

Problems	% of villages				Ranking
	Priorities n°1	Priorities n°2	Priorities n°3	Priorities n°4	
Breeding	0	18	**71.6**	10.4	**3**
Diseases	**89.6**	8.3	2.1	0	**1**
Housing	1.4	2.1	9	**87.5**	**4**
Nutrition	9	**71.6**	17.4	2.1	**2**

Table 15: Grazing area

	% or average for Hesa e Awal
Villages with a grazing area	100
Average distance from the grazing area	1h 36
Villages with a daily grazing area	100
Villages with a summer grazing area	0
Villages with a water point in the grazing area	46.5

IV Infrastructures, rehabilitation and construction needs

Table 16: Existing infrastructures

Infrastructures	Total for Hesa e Awal
Human clinics	1
Schools	3
Wells	0
Water supply	0
Houses	2876
Governmental offices	0

Table 17: Condition of the infrastructures

Infrastructures	Total number in Hesa e Awal		
	Unaffected	Damaged	Destroyed
Human clinics	1	0	0
Houses	2607	269	232
Schools	1	2	0
Water supply	0	0	0
Wells	0	0	0

Table 18: Construction and reconstruction priorities

Problems	% of villages					Ranking
	Priorities n°1	Priorities n°2	Priorities n°3	Priorities n° 4	Priorities n°5	
Houses	10.4	0	0.7	**22.9**	4.2	**4**
Human clinic	**27.7**	0	0	0	0	**1**
Wells	0	0	0	4.9	**22.9**	**5**
Schools	0	**27.8**	0	0	0	**2**
Water supply	0	0	**27.1**	0	0.7	**3**
No problems	61.9	72.2	72.2	72.2	72.2	

Table 19: Irrigation infrastructure before the war

Irrigation infrastructures	% for all the villages of Hesa e Awal
Villages with karezes	0
Villages with canals	38.9
Villages with springs	70.8
Villages with nawurs	77.1

Table 20: Irrigation infrastructures needs for rehabilitation

Needs for rehabilitation	Number of villages of Hesa e Awal	% / all the villages of Hesa e Awal
Inventory of the irrigation problems of the villages:		
Reconstruction of water intake	37	25.7
Reconstruction of other canal structure	19	13.2
Reconstruction of nawur	106	73.6
Reconstruction of Kareze	0	0
Main irrigation problem in the village		
Reconstruction of water intake	30	20.8
Reconstruction of other canal structure	17	11.8
Reconstruction of nawur	89	61.8
Reconstruction of Kareze	0	0
Reconstruction of nothing	8	5.6

Table 21: Inventory and condition of the roads

	Number of villages	% for Hesa e Awal
Villages with a 2x2 road	2	1.4
Villages with a 4x4 road	82	56.9
Villages with a mule road	60	41.7
Villages with a road in poor condition	82	56.9
Villages with a road in fairly good condition	62	43.1
Villages with road in good condition	0	0

Table 22: Main request of the villages

Request of the villages	Number of village	% Hesa e Awal
Animal clinic	4	2.8
Erosion barrier	2	1.4
Human clinic	67	46.5
Rehabilitation of intake	14	9.7
Rehabilitation of canal	3	2.1
Rehabilitation of kareze	1	0.7
Rehabilitation of nawur	11	7.6
Rehabilitation of spring	33	22.9
Road construction	3	2.1
School	6	4.2
Agriculture program	0	

Table 23 : Presence and activities of the NGOs

Names of the NGOs	Activities	% of villages concerned by the help
MADERA	Agriculture program civil engineering	68.1
AVICEN	Health	0.7

District : BEHSUD 2

Province : WARDAK

Sub districts : Tagab, Meher Khana, Khuna Qala, Markaz e Behsud, Helmand

Number of villages surveyed : 579

Number of villages not surveyed : 0

Approximate area of the district : 2585.6 km²

Brief analysis

I Population and refugees

Table 1 : Population census

Cathegories of population	Number	Percentage/ total population
Total number of families	24934	100
Present number of families	18401	73.8
Number of families before the war	15257	61
Present number of returned families	458	1.8
Number of permanent IDPs	950	3.8
Number of temporary IDPs	406	1.6
Number of families still outside Afghanistan	3797	15.2
Number of families in Afghanistan not yet returned to their village	2736	11

Table 2 : Years of departures and return of refugees

Years of departure and return	Number of villages where the majority of people left or return at that date	Percentage/total number of villages
Departures:		
Never	61	10.5
1977-79	90	15.5
1980-82	376	65
1983-86	31	5.4
1987-93	21	3.6
Returns:		
Not yet	426	82.2
1984-86	2	0.4
1990-93	33	6.4
1994-96	57	11

Table 3: Location of the refugees and IDPs outside and inside Afghanistan

Location	Number of villages with refugees mainly located in the town of the countries mentionned below	%/ total number of villages
Pakistan:		
Nobody	428	73.9
Islamabad	2	0.3
Karachi	15	2.6
Peshawar	11	1.9
Quetta	119	20.6
Para Chanar	4	0.7
Iran:		
Nobody	125	21.6
Asfahan	22	3.8
Bandar Abas	1	0.2
Kerma	4	0.7
Mashad	107	18.5
Qoum	106	18.4
Shiraz	6	1
Teheran	203	35
Zahedan	3	0.5
Araka	2	0.3
Afghanistan		
Nobody	150	25.9
Bamian	5	0.9
Behsud	27	4.7
Herat	4	0.7
Kabul	375	64.8
Mazar	16	2.7
Parwan	2	0.3

II Agriculture

Table 4: Means of production before the war and now

Means of production	Total for all the villages
Before the war:	
Number of jeribs irrigated before the war	38335
Average number of irrigated jeribs per family before the war	2.51
Number of jeribs rainfed before the war	41974
Average number of rainfed jeribs per family before the war	2.75
In November 1996	
Number of jeribs irrigated	29724
Average number of irrigated jeribs per family	1.61
Number of jeribs rainfed	33379
Average number of rainfed jeribs per family	1.81
Number of pair of oxen	4319.5
Average number of pair of oxen per family	0.23
Number of tractors	1 (MADERA)
Number of threshers	1 (MADERA)
Number of seed cleaners	0

Table 5: Land ownership

Villages where:	Number of villages	% / total number of villages
All the villagers where owner before the war	350	60.7
The proportion of land less people is less than before the war	77	13.3
The proportion of land less people is more than before the war	24	4.1
The proportion of land less people is the same as before the war	132	22.9
There was no land less people in November 1996	343	59.5

Table 6 : Cereals cultivated before the war and now

Cereals	% of villages before the war			% of villages now		
	First cereal	Second cereal	Third cereal	First cereal	Second cereal	Third cereal
Wheat	**100**	0	0	**100**	0	0
Barley	0	**98.3**	0.3	0	**97.9**	0.2
Maize	0	0.5	0.2	0	0.4	0.4
No other cereal	0	1.2	**99.5**	0	1.7	**99.4**
% villages with 1, 2 or 3 cereals	**100**	**98.8**	**1.6**	**100**	**98.3**	**1.6**

Table 7 : Legumes cultivated before the war and now

Legumes	% of villages before the war			% of villages now		
	First legume	Second legume	Third legume	First legume	Second legume	Third legume
Broad beans	27	6.6	7.9	19.7	6.3	6.7
Peas	25.6	**41.8**	18.1	26	**33.5**	17.4
Shakhal	**27.9**	28.5	**25**	**30.8**	30.5	**18.7**
Calul	1.5	5.2	6.4	1.2	4.7	5.5
Lentil	14.5	10.1	11.3	16.7	11.3	8.33
Gram	0.4	0	0	0.4	0	0
No other legume	3.1	7.8	31.3	5.3	13.7	43.4
% villages with 1, 2 or 3 legumes	**96.9**	**92.2**	**68.7**	**94.7**	**86.3**	**56.6**

Table 8 : Fodder crops cultivated before the war and now

Fodder crops	% of villages before the war			% of villages now		
	First F. crop	Second F. crop	Third F. crop	First F. crop	Second F. crop	Third F.crop
Alfalfa	**99.7**	0	0	**99.3**	0	0
Beldarghow	0	12.5	**2.9**	0.2	13.7	**2.9**
Clover	0	**15.4**	2.1	0.2	9.8	2.1
No other Fodder crops	0.3	72.1	95	0.3	76.5	95
% villages with 1, 2 or 3 fodder crops	**99.7**	**27.9**	**05**	**99.7**	**23.5**	**0**

Table 9 : Vegetables cultivated before the war and now

Vegetables	% of villages before the war			% of villages now		
	First veget.	Second veget.	Third veget.	First veget.	Second veget.	Third veget.
Carrot	0	31.9	14	0	30.7	13.4
Garlic	0	0.2	0.5	0	0.2	0.6
Onion	0	0.9	1.4	0	1.6	1.6
Potatoes	**93.9**	0.2	0	**94.6**	0	0
Radish	0	0.2	0	0	0	0
Tomatoes	0	0	0.4	0	0	1.1
Squash	0	1.2	4.8	0	1.6	**8**
Leek	0	0	0.5	0	0	0.4
Turnip	0.5	**32.6**	**16.7**	0.2	**32.5**	**16**
No other vegetable	5.6	32.8	61.5	5.2	33.4	59.8
% villages with 1, 2 or 3 vegetables	**94.4**	**67.2**	**38.5**	**94.8**	**66.6**	**40.2**

Table 10 : Orchards cultivated before the war and now

Orchards	% of villages before the war			% of villages now		
	First orchard	Second orchard	Third orchard	First orchard	Second orchard	Third orchard
Almond	0	0	0	0.2	0	0.2
Apple	1.1	0.7	0	**24.1**	1.9	0.2
Apricot	**5.9**	0.7	0	6.5	**13.7**	0
Mulberry	0.2	0.7	0.3	0	0.2	**0.5**
No other orchards	92.8	97.9	99.7	69.2	84.2	99.1
% villages with 1, 2 or 3 orchards	**7.2**	**2.1**	**0.3**	**30.8**	**15.8**	**0.9**

Table 11 : Other crops cultivated before the war and now

Other crops	% of villages before the war			% of villages now		
	First oth. crop	Second oth. crop	Third oth. crop	First oth. crop	Second oth. crop	Third oth. crop
Sugar beet	0	0	0	0.3	0	0
Forest trees	**6.8**	0	0	**5.4**	0	0
No other crops	93.2	100	100	94.3	100	100
% villages with 1, 2 or 3 other crops	**6.8**	**0**	**0**	**5.7**	**0**	**0**

III Livestock

Table 12: Animal census

	Total for Behsud 2 (heads)
Horses	514
Donkeys	16670
Cows	12295
Sheep	127799
Goats	38844
Poultry	58822
% more animal before the war	17.6
% villages with more animals before the war than now	76.7

Table 13: Animal ownership

	% or average for Behsud 2
Animal owners now	99.3%
Average number of horses/family	0.02
Average number of donkeys/family	0.9
Average number of cows/family	0.7
Average number of sheep/ family	6.9
Average number of goats/family	2.1
Average number of poultry/family	3.2

Table 14 : Ranking of livestock problems

Problems	**% of villages**				**Ranking**
	Priorities n°1	Priorities n°2	Priorities n°3	Priorities n°4	
Breeding	0	21.5	**58.5**	20.4	**3**
Diseases	**83.6**	16.4	0	0	**1**
Housing	0	3.6	23.9	**71.8**	**4**
Nutrition	16.4	**58.5**	17.4	7.5	**2**

Table 15: Grazing area

	% or average for Behsud 2
Villages with a grazing area	99.8%
Average distance from the grazing area	60mn
Villages with a daily grazing area	99.1
Villages with a summer grazing area	2.6%
Villages with a water point in the grazing area	39.7%

IV Infrastructures, rehabilitation and construction needs

Table 16: Existing infrastructures

Infrastructures	Total for Behsud 2
Human clinics	3
Schools	30
Wells	1750
Water supply	10
Houses	14775
Governmental offices	0

Table 17: Condition of the infrastructures

Infrastructures	Total number in Behsud 2		
	Unaffected	Damaged	Destroyed
Human clinics	2	1	0
Houses	11460	2290	1025
Schools	11	8	11
Water supply	10	0	0
Wells	939	528	276

Table 18: Construction and reconstruction priorities

Problems	% of villages					Ranking
	Priorities n°1	Priorities n°2	Priorities n°3	Priorities n° 4	Priorities n°5	
Houses	**74.8**	5.4	0.2	0	0	**1**
Human clinic	0.2	0	0	0	0	**4**
Wells	6.9	**27.9**	**1.7**	0	0	**2**
Schools	2.7	0.5	0	0	0	**3**
Water supply	0	0	0	0	0	**5**
No problems	15.4	66.2	98.1	100	100	

Table 19: Irrigation infrastructure before the war

Irrigation infrastructures	% for all the villages of Behsud 2
Villages with karezes	41.5
Villages with canals	41.4
Villages with springs	92.7
Villages with nawurs	93.4

Table 20: Irrigation infrastructures needs for rehabilitation

Needs for rehabilitation	Number of villages of Behsud 2	% / all the villages of Behsud 2
Inventory of the irrigation problems of the villages:		
Reconstruction of water intake	159	27.6
Reconstruction of other canal structure	150	26
Reconstruction of nawur	453	78.6
Reconstruction of Kareze	227	39.3
Main irrigation problem in the village		
Reconstruction of water intake	79	13.7
Reconstruction of other canal structure	88	15.3
Reconstruction of nawur	367	63.7
Reconstruction of nothing	42	7.3

Table 21: Inventory and condition of the roads

	Number of villages	% for Behsud 2
Villages with a 2x2 road	24	4.3
Villages with a 4x4 road	65	45.9
Villages with a mule road	287	49.8
Villages with a road in poor condition	256	44.5
Villages with a road in fairly good condition	318	55.5

Table 22: Main request of the villages

Request of the villages	Number of village	% Behsud 2
Animal clinic	83	**14.5**
Flood protection	2	0.3
Rehabilitation spring	37	6.5
Human clinic	123	**21.4**
Rehabilitation of intake	31	5.5
Rehabilitation of canal	14	2.4
Rehabilitation of kareze	50	8.7
Rehabilitation of Nawur	10	1.7
Road construction	74	**12.9**
School	108	**18.8**
Agriculture program	38	6.7
Nothing	2	0.3
Rehabilitation of destroyed land	2	0.3

Table 23 : Presence and activities of the NGOs

Names of the NGOs	Activities	% of villages concerned by the help
MADERA	Agriculture program	25.8
AVICEN	Health	26.3
S.C.A	Health	0.7

Sub-district :Helmand

Number of villages surveyed: 98
Number of villages not surveyed: 0
Approximate area of the district: 301.8 km2
Date of survey: October-November 1996

I Presentation of the area

The two districts of Behsud I and Behsud II are located to the north west of Kabul and belong to the province of Wardak. They cover a mountainous area of approximately 3940 km² of the region of Hazarajat. Recently, these two districts have been divided by the local authorities into eight sub-districts as follow (see map n°1):

-Behsud I : Day mirdad, Quli Kish, Hesa e Awal

-Behsud II : Khuna Qala, Tagab, Meher Khana, Markaz e Behsud and Helmand.

The whole area is exclusively inhabited by the Hazara ethnic group.

II Population and refugees

2.1 Demography (See annexes pages : 2)

Despite the trouble of the war the population of these two districts has grown considerably. Actually, the total population has increased from 22,940 families before the war to 39,724 families in November 1996 (refugees and IDPs included). This is an increase of 73% in approximately 19 years, that is to say an average annual growth rate of 3.8% for the whole area. Nevertheless, there is an important difference between the two districts as Behsud I has an annual growth rate of 4.86% per year over 19 years whilst Behsud II has only 3.3%.
Furthermore, the density of population before the war was approximately 35 people per km² for the whole area (if we consider 6 people per families). It is now 43.5 people per km² and will become 60.5 people per km² if all the refugees come back. Here, we notice a slight difference between the two districts with a density of 45.2 people per km² for Behsud I and 42.7 for behsud II (65.5 and 57.8 if all the refugees come back). This density of population seems to be very low compared to other areas. However if we consider that the areas where water is available and where life is possible do not exceed 5%[1], the density then becomes very important with 871 people per km² and 1210 people per km² if all the refugees and IDPs come back.

2.2 Refugees, returnees and IDPs (See annexes pages : 2, 3)

It seems that the majority of the refugees and IDPs left the place in the beginning of the eighties. Most of them moved inside Afghanistan or went to Iran. Eighty nine percent of all the villages have IDPs in Afghanistan. These IDPs are mainly located in Kabul (70.7% of the 842 villages). Eighty eight percent of the villages have refugees in Iran. They are mainly located in Teheran (31.3% of the 842 villages), in Mashad, Qoum, and Asfahan.
Furthermore, 39% of the village have refugees in Pakistan who are mainly located in Quetta (19.6% of all the 842 villages).

[1] If we just compare the total number of jeribs irrigated to the total area of the two districts, the percentage of land irrigated represents only 2.5% of the total area. But this does not include the rainfed land, the habitation land, etc. To take this into account we take an average of 5% as a margin of error.

I Population and refugees

Table 1 : Population census

Cathegories of population	Number	Percentage/ total population
Total number of families	5413	100
Present number of families	3512	64.9
Number of families before the war	3462	64
Present number of returned families	240	4.4
Number of permanent IDPs	62	1.1
Number of temporary IDPs	67	1.2
Number of families still outside Afghanistan	818	15.1
Number of families in Afghanistan not yet returned to their village	1083	20

Table 2 : Years of departures and return of refugees

Years of departure and return	Number of villages where the majority of people left or return at that date	Percentage/total number of villages
Departures:		
Never	0	0
1980-82	94	95.9
1983-84	4	4.1
Returns:		
Not yet	51	52
1992-93	18	18.4
1994-95	25	25.5
1996	4	4.1

Table 3: Location of the refugees and IDPs outside and inside Afghanistan

Location	Number of villages with refugees mainly located in the town of the countries mentionned below	%/ total number of villages
Pakistan:		
Nobody	53	54.1
Karachi	9	9.2
Peshawar	6	6.1
Quetta	28	28.6
Para Chenar	2	2
Iran:		
Nobody	8	8.2
Asfahan	12	12.2
Kerman	2	2
Mashad	10	10.2
Qoum	20	20.5
Teheran	46	46.9
Afghanistan		
Bamian	1	1
Kabul	93	95
Mazar	2	2
Behsud	2	2

II Agriculture

Table 4: Means of production before the war and now

Means of production	Total for all the villages
Before the war:	
Number of jeribs irrigated before the war	8636.8
Average number of irrigated jeribs per family before the war	2.5
Number of jeribs rainfed before the war	13120.6
Average number of rainfed jeribs per family before the war	3.8
In November 1996	
Number of jeribs irrigated	6393.3
Average number of irrigated jeribs per family	1.8
Number of jeribs rainfed	7759.7
Average number of rainfed jeribs per family	2.2
Number of pair of oxen	658
Average number of pair of oxen per family	0.2
Number of tractors	0
Number of threshers	0
Number of seed cleaners	0

Table 5: Land ownership

Villages where:	Number of villages	% / total number of villages
All the villagers where owner before the war	61	62.2
The proportion of land less people is less than before the war	16	16.3
The proportion of land less people is more than before the war	3	3.1
The proportion of land less people is the same as before the war	17	17.3
There was no land less people in November 1996	62	63.3

Table 6 : Cereals cultivated before the war and now

Cereals	**% of villages before the war**			**% of villages now**		
	First cereal	Second cereal	Third cereal	First cereal	Second cereal	Third cereal
Wheat	**100**	0	0	**100**	0	0
Barley	0	**100**	0	0	**100**	0
Maize	0	0	0	0	0	0
No other cereal	0	0	100	0	0	100
% villages with 1, 2 or 3 cereals	**100**	**100**	**0**	**100**	**100**	**0**

Table 7 : Legumes cultivated before the war and now

Legumes	**% of villages before the war**			**% of villages now**		
	First legume	Second legume	Third legume	First legume	Second legume	Third legume
Beans	0	0	0	0	0	0
Broad beans	3.1	20.4	20.4	2	18.4	15.4
Peas	32.6	21.4	**34.7**	31.6	13.3	**41.8**
Shakhal	17.3	**35.7**	13.3	8.2	**46.9**	11.2
Calul	0	2	14.3	0	2	11.2
Lentil	**43.9**	15.4	5.1	**53.1**	13.3	6.1
Mung beans	0	0	0	0	0	0
Gram	0	0	0	0	0	0
No other legume	3.1	5.1	12.2	5.1	6.1	14.3
% villages with 1, 2 or 3 legumes	**96.9**	**94.9**	**87.8**	**94.9**	**93.9**	**85.7**

Table 8 : Fodder crops cultivated before the war and now

Fodder crops	**% of villages before the war**			**% of villages now**		
	First F. crop	Second F. crop	Third F. crop	First F. crop	Second F. crop	Third F.crop
Alfalfa	**100**	0	0	**100**	0	0
Clover	0	**7.1**	0	0	**9.2**	0
No other Fodder crops	0	92.9	100	0	90.8	100
% villages with 1, 2 or 3 fodder crops	**100**	**7.1**	**0**	**100**	**9.2**	**0**

Table 9 : Vegetables cultivated before the war and now

Vegetables	**% of villages before the war**			**% of villages now**		
	First veget.	Second veget.	Third veget.	First veget.	Second veget.	Third veget.
Carrot	0	**74.5**	1	0	**87.8**	0
Garlic	0	1	2	0	1	2
Onion	0	0	0	0	0	0
Potatoes	**94.9**	0	0	**100**	0	0
Radish	0	0	0	0	0	0
Squash	0	0	11.2	0	0	16.3
Turnip	0	1	**48**	0	0	**54.1**
No other vegetable	5.1	24.5	37.8	0	11.2	27.6
% villages with 1, 2 or 3 vegetables	**94.9**	**76.5**	**62.2**	**100**	**88.8**	**72.4**

Table 10 : Orchards cultivated before the war and now

Orchards	**% of villages before the war**			**% of villages now**		
	First orchard	Second orchard	Third orchard	First orchard	Second orchard	Third orchard
Apple	**1**	0	0	**92.9**	0	0
Apricot	0	**1**	0	0	**66.3**	0
Cherry	0	0	0	0	0	0
Plum	0	0	0	0	0	0
Walnut	0	0	0	0	0	0
No other orchards	99	99	100	7.1	33.7	100
% villages with 1, 2 or 3 orchards	**1**	**1**	**0**	**92.9**	**66.3**	**0**

Table 11 : Other crops cultivated before the war and now

Other crops	**% of villages before the war**			**% of villages now**		
	First oth. crop	Second oth. crop	Third oth. Crop	First oth. crop	Second oth. crop	Third oth. crop
Sugar beet	0	0	0	**2**	0	0
No other crops	100	100	100	98	100	100
% villages with 1, 2 or 3 other crops	**0**	**0**	**0**	**2**	**0**	**0**

III Livestock

Table 12: Animal census

	Total for Helmand (heads)
Horses	55
Donkeys	3478
Cows	2157
Sheep	16352
Goats	6979
Poultry	10297
% more animal before the war	45.3
% villages with more animals before the war than now	93.8

Table 13: Animal ownership

	% or average for Helmand
Animal owners now	100
Average number of horses/family	0.015
Average number of donkeys/family	0.99
Average number of cows/family	0.6
Average number of sheep/ family	4.7
Average number of goats/family	2
Average number of poultry/family	2.9

Table 14 : Ranking of livestock problems

Problems	% of villages				Ranking
	Priorities n°1	Priorities n°2	Priorities n°3	Priorities n°4	
Breeding	0	14.3	**72.4**	13.3	**3**
Diseases	**77.6**	22.4	0	0	**1**
Housing	0	1	12.2	**86.7**	**4**
Nutrition	22.4	**63.3**	15.4	0	**2**

Table 15: Grazing area

	% or average for Helmand
Villages with a grazing area	100
Average distance from the grazing area	54mn
Villages with a daily grazing area	100
Villages with a summer grazing area	2
Villages with a water point in the grazing area	72.4

IV Infrastructures, rehabilitation and construction needs

Table 16: Existing infrastructures

Infrastructures	Total for Helmand
Human clinics	0
Schools	11
Wells	694
Water supply	0
Houses	3056
Governmental offices	0

Table 17: Condition of the infrastructures

Infrastructures	Total number in Helmand		
	Unaffected	Damaged	Destroyed
Human clinics	0	0	0
Houses	1388	1027	641
Schools	0	2	9
Water supply	0	0	0
Wells	325	131	238

Table 18: Construction and reconstruction priorities

Problems	% of villages					Ranking
	Priorities n°1	Priorities n°2	Priorities n°3	Priorities n° 4	Priorities n°5	
Houses	**86.7**	4.1	1	0	0	**1**
Human clinic	0	0	0	0	0	
Wells	0	**64.3**	4.1	0	0	**2**
Schools	5.1	1	0	0	0	**3**
Water supply	0	0	0	0	0	
No problems	8.2	34.7	94.9	0	0	

Table 19: Irrigation infrastructure before the war

Irrigation infrastructures	% for all the villages of Helmand
Villages with karezes	73.5
Villages with canals	76.5
Villages with springs	92.8
Villages with nawurs	91.8

Table 20: Irrigation infrastructures needs for rehabilitation

Needs for rehabilitation	Number of villages of Helmand	% / all the villages of Helmand
Inventory of the irrigation problems of the villages:		
Reconstruction of water intake	63	64.3
Reconstruction of other canal structure	56	57.1
Reconstruction of nawur	61	62.2
Reconstruction of Kareze	72	73.5
Main irrigation problem in the village		
Reconstruction of water intake	32	32.7
Reconstruction of other canal structure	30	30.6
Reconstruction of nawur	24	24.5
Reconstruction of Kareze	0	0
Reconstruction of nothing	12	12.2

Table 21: Inventory and condition of the roads

	Number of villages	% for Helmand
Villages with a 2x2 road	18	18.4
Villages with a 4x4 road	58	59.2
Villages with a mule road	22	22.4
Villages with a road in poor condition	58	59.2
Villages with a road in fairly good condition	39	39.8
Villages with road in good condition	1	1

Table 22: Main request of the villages

Request of the villages	Number of village	% Helmand
Animal clinic	14	14.3
Human clinic	19	**19.4**
Rehabilitation of intake	10	10.2
Rehabilitation of canal	9	9.2
Rehabilitation of kareze	14	14.3
Road construction	5	5.1
School	25	**25.5**
Agriculture program	2	2

Table 23 : Presence and activities of the NGOs

Names of the NGOs	Activities	% of villages concerned by the help
MADERA	Agriculture program	34.7
AVICEN	Health	21.4

Sub district : Khuna Qala

Number of villages surveyed: 108
Number of villages not surveyed: 0
Approximate area of the district: 763.8 km2
Date of survey: October-November 1996

MAP N° 1

Province of WARDAK (Behsud part 1 & 2)

BEHSUD 1

BEHSUD 2

34°45'

34°30'

34°15'

67°15'

67°30'

67°45'

68°00'

Quli Khish

Meher Khana

Helmand

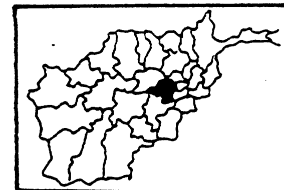
Hesa-e-Awal

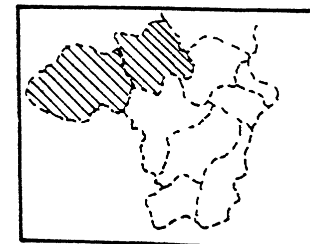
Tagab

Markaz-e-Beshud

Day Mirdad

Khuna Qala





I Population and refugees

Table 1 : Population census

Cathegories of population	Number	Percentage/ total population
Total number of families	6441	-
Present number of families	4900	76
Number of families before the war	3521	54.7
Present number of returned families	20	0.3
Number of permanent IDPs	389	6
Number of temporary IDPs	2	0.03
Number of families still outside Afghanistan	1166	18.2
Number of families in Afghanistan not yet returned to their village	375	5.8

Table 2 : Years of departures and return of refugees

Years of departure and return	Number of villages where the majority of people left or return at that date	Percentage/total number of villages
Departures:		
Never	13	12
1978-79	41	38
1980-82	60	55.5
1984-85	5	4.6
1992-93	2	1.8
Returns:		
Not yet	107	99.1
1995	1	0.9

Table 3: Location of the refugees and IDPs outside and inside Afghanistan

Location	Number of villages with refugees mainly located in the town of the countries mentionned below	%/ total number of villages
Pakistan:		
Nobody	82	75.9
Islamabad	1	0.9
Karachi	2	1.9
Peshawar	3	2.8
Quetta	20	18.5
Iran:		
Nobody	20	18.5
Asfahan	2	1.9
Kashan	1	0.9
Mashad	13	12
Qoum	61	56.5
Shiraz	2	1.9
Teheran	9	8.3
Afghanistan		
Nobody	46	42.6
Kabul	60	55.5
Mazar	2	1.9

II Agriculture

Table 4: Means of production before the war and now

Means of production	Total for all the villages
Before the war:	
Number of jeribs irrigated before the war	8384.5
Average number of irrigated jeribs per family before the war	2.4
Number of jeribs rainfed before the war	2770.7
Average number of rainfed jeribs per family before the war	0.8
In November 1996	
Number of jeribs irrigated	6762.5
Average number of irrigated jeribs per family	1.38
Number of jeribs rainfed	2546
Average number of rainfed jeribs per family	0.5
Number of pair of oxen	831
Average number of pair of oxen per family	0.17
Number of tractors	0
Number of threshers	0
Number of seed cleaners	0

Table 5: Land ownership

Villages where:	Number of villages	% / total number of villages
All the villagers where owner before the war	69	63.8
The proportion of land less people is less than before the war	18	16.7
The proportion of land less people is more than before the war	1	0.9
The proportion of land less people is the same as before the war	20	18.6
There was no land less people in November 1996	69	63.8

Table 6 : Cereals cultivated before the war and now

Cereals	% of villages before the war			% of villages now		
	First cereal	Second cereal	Third cereal	First cereal	Second cereal	Third cereal
Wheat	**100**	0	0	**100**	0	0
Barley	0	**93.5**	1.9	0	**94.4**	0.9
Maize	0	1.9	0.9	0	1.9	1.9
No other cereal	0	4.6	97.2	0	3.7	97.2
% villages with 1, 2 or 3 cereals	100	95.4	**2.8**	**100**	**96.3**	**2.8**

Table 7 : Legumes cultivated before the war and now

Legumes	% of villages before the war			% of villages now		
	First legume	Second legume	Third legume	First legume	Second legume	Third legume
Beans	0	0	0	0	0	0
Broad beans	**38.9**	1.9	1.9	**32.4**	1.9	3.7
Peas	36.1	34.2	16.7	37	22.2	15.7
Shakhal	5.5	**41.7**	**44.4**	8.3	**46.3**	**35.2**
Calul	0	0	0	0	0	0
Lentil	17.6	22.2	2.8	15.8	23.1	2.8
Mung beans	0	0	0	0	0	0
Gram	1.9	0	0	1.9	0	0
No other legume	0	0	34.2	4.6	6.5	42.6
% villages with 1, 2 or 3 legumes	**100**	**100**	**65.8**	**95.4**	**93.5**	**57.4**

Table 8 : Fodder crops cultivated before the war and now

Fodder crops	% of villages before the war			% of villages now		
	First F. crop	Second F. crop	Third F. crop	First F. crop	Second F. crop	Third F.crop
Alfalfa	**99.1**	0	0	**98.2**	0	0
Clover	0	**9.3**	0	0.9	**7.4**	0
No other Fodder crops	0.9	90.7	100	0.9	92.6	100
% villages with 1, 2 or 3 fodder crops	**99.1**	**9.3**	**0**	**99.1**	**7.4**	**0**

Table 9 : Vegetables cultivated before the war and now

Vegetables	**% of villages before the war**			**% of villages now**		
	First veget.	Second veget.	Third veget.	First veget.	Second veget.	Third veget.
Carrot	0	4.6	**21.3**	0	3.7	**16.65**
Garlic	0	0	0.9	0	0	0
Onion	0	0.9	1.9	0	3.7	1.9
Potatoes	**98.1**	0	0	**99.1**	0	0
Radish	0	0	0	0	0	0
Tomatoes	0	0	0	0	0	0
Squash	0	6.5	10.2	0	8.3	**16.65**
Turnip	0	**58.3**	3.7	0	**57.4**	7.4
No other vegetable	1.9	29.7	62	0.9	26.9	57.4
% villages with 1, 2 or 3 vegetables	**98.1**	**70.3**	**38**	**99.1**	**73.1**	**42.6**

Table 10 : Orchards cultivated before the war and now

Orchards	**% of villages before the war**			**% of villages now**		
	First orchard	Second orchard	Third orchard	First orchard	Second orchard	Third orchard
Apple	0.9	0.9	0	1.9	**4.6**	0
Apricot	**17.6**	0.9	0	**20.4**	1.9	0
Cherry	0	0	0	0	0	0
Plum	0	0	0	0	0	0
Walnut	0	0	0	0	0	0
No other orchards	81.5	98.2	100	77.7	93.5	100
% villages with 1, 2 or 3 orchards	**18.5**	**1.8**	**0**	**22.3**	**6.5**	**0**

Table 11 : Other crops cultivated before the war and now

Other crops	**% of villages before the war**			**% of villages now**		
	First oth. crop	Second oth. crop	Third oth. Crop	First oth. crop	Second oth. crop	Third oth. crop
No other crops	100	100	100	100	100	100
% villages with 1, 2 or 3 other crops	**0**	**0**	**0**	**0**	**0**	**0**

III Livestock

Table 12: Animal census

	Total for Khuna Qala (heads)
Horses	118
Donkeys	4112
Cows	3654
Sheep	33858
Goats	10960
Poultry	17571
% less animal before the war	4.7
% villages with less animals before the war than now	57.4

Table 13: Animal ownership

	% or average for Khuna Qala
Animal owners now	99.9
Average number of horses/family	0.02
Average number of donkeys/family	0.8
Average number of cows/family	0.7
Average number of sheep/ family	6.9
Average number of goats/family	2.2
Average number of poultry/family	3.6

Table 14 : Ranking of livestock problems

Problems	% of villages				Ranking
	Priorities n°1	Priorities n°2	Priorities n°3	Priorities n°4	
Breeding	0	45.4	**53.7**	2.8	**3**
Diseases	**92.6**	7.4	0	0	**1**
Housing	0	0	8.3	**89.8**	**4**
Nutrition	7.4	**47.2**	38	7.4	**2**

Table 15: Grazing area

	% or average for Kuhna Qala
Villages with a grazing area	100
Average distance from the grazing area	1h
Villages with a daily grazing area	100
Villages with a summer grazing area	1.9
Villages with a water point in the grazing area	50

IV Infrastructures, rehabilitation and construction needs

Table 16: Existing infrastructures

Infrastructures	Total for Kuhna Qala
Human clinics	0
Schools	1
Wells	64
Water supply	10
Houses	3801
Governmental offices	0

Table 17: Condition of the infrastructures

Infrastructures	Total number in Khuna Qala		
	Unaffected	Damaged	Destroyed
Human clinics	0	0	0
Houses	3476	319	6
Schools	1	0	0
Water supply	0	0	0
Wells	56	25	1

Table 18: Construction and reconstruction priorities

Problems	% of villages					Ranking
	Priorities n°1	Priorities n°2	Priorities n°3	Priorities n° 4	Priorities n°5	
Houses	**68.6**	3.7	0	0	0	**1**
Human clinic	0	0	0	0	0	
Wells	4.6	**5.6**	0	0	0	**2**
Schools	0	0	0	0	0	
Water supply	0	0	0	0	0	
No problems	26.8	90.7	100	100	100	

Table 19: Irrigation infrastructure before the war

Irrigation infrastructures	% for all the villages of Kuhna Qala
Villages with karezes	27.8
Villages with canals	19.4
Villages with springs	99.1
Villages with nawurs	99.1

Table 20: Irrigation infrastructures needs for rehabilitation

Needs for rehabilitation	Number of villages of Kuhna Qala	% / all the villages of Kuhna Qala
Inventory of the irrigation problems of the villages:		
Reconstruction of water intake	12	11.1
Reconstruction of other canal structure	15	13.9
Reconstruction of nawur	96	88.9
Reconstruction of Kareze	29	26.8
Main irrigation problem in the village		
Reconstruction of water intake	8	7.4
Reconstruction of other canal structure	4	3.7
Reconstruction of nawur	89	82.4
Reconstruction of Kareze	0	0
Reconstruction of nothing	7	6.5

Table 21: Inventory and condition of the roads

	Number of villages	% for Kuhna Qala
Villages with a 2x2 road	1	0.9
Villages with a 4x4 road	33	30.6
Villages with a mule road	74	68.5
Villages with a road in poor condition	7	6.5
Villages with a road in fairly good condition	99	91.6
Villages with a road in good condition	2	1.9

Table 22: Main request of the villages

Request of the villages	Number of village	% Kuhna Qala
Animal clinic	20	18.6
Rehabilitation spring	1	0.9
Human clinic	15	13.9
Rehabilitation of intake	6	5.6
Rehabilitation of canal	1	0.9
Rehabilitation of kareze	9	8.3
Rehabilitation of Nawur	1	0.9
Road construction	9	8.3
School	35	32.4
Agriculture program	11	10.2

Table 23 : Presence and activities of the NGOs

Names of the NGOs	Activities	% of villages concerned by the help
S.C.A	Health	2.7

Sub-district :Markaz e Behsud

Number of villages surveyed: 134
Number of villages not surveyed: 0
Approximate area of the district: 661.5 km2
Date of survey: October-November 1996

Some differences exist at the level of sub districts. Thus the main refugee location in Iran for some sub-districts is not Teheran but Mashad, Qoum or Zahedan. This tend to show that there is a link between the place of origin in Hazarajat and the location in Iran.

The total number of refugees families still outside Afghanistan is equal to 6268. This means 16% of the total population and 22% of the present population. At the level of the sub-district it varies from 10% to 26% of the total population.
At the level of the villages it varies from 0 to 90 families per villages and from 0% to more than 160% of the present population of the village.

Besides this, the total number of IDPs families not yet returned to their villages is equal to 5207. This means 13.1% of the total population and 18.2% of the present population. At the level of the sub-district it varies from 6.5 to 20% of the total population. At the level of the village it varies from 0 to 75 families and to 0% to 230% of the present population of the village.
If we add the refugees to the IDPs, the total number of families who might come back is raised to 11475. That is to say 29.1% of the total population and 40.2% compared to the present population. At the level of the sub-district it represents 21% to 39.5% of the total population.
However, identification of target areas with a high potential of return of refugees and IDPs was not possible. The villages with a lot of refugees or IDPs outside are not grouped.

The process of the return of refugees has begun since the beginning of the nineties but remain very low. For the entire area, no refugees or IDPs came back in 71% of the villages with refugees or IDPs outside. At the level of the sub district this percentage higher than to 84% in 5 of the 8 sub-districts of Behsud I and Behsud II (Kuhna Qala, Meher Khana, Markaz e Behsud, Quli khish, Hesa e Awal and Tagab).

The number of permanent or temporary IDPs in the villages was quite low in November 1996 despite the lack of security in Kabul at that time. The total number of permanent and temporary IDPs did not exceed 1908 families which means 4.8% of the total population. This region is not a very welcoming place to go for people in difficulty.

III Agriculture and livestock

3.1 Land under cultivation and ownership (See annexes pages : 4)

The total area under cultivation now is less than before the war. At the level of the two districts, the loss is close to 11061 jeribs irrigated (2212.2 ha) and 9545 jeribs rainfed (1909 ha). It means a loss of 18.6% of irrigated land and 19% of rainfed land compared to before the war. Nevertheless some differences exists between the sub-districts (see table n°1 behind).

I Population and refugees

Table 1 : Population census

Cathegories of population	Number	Percentage/ total population
Total number of families	6127	-
Present number of families	4806	78.4
Number of families before the war	3747	61.2
Present number of returned families	124	4.4
Number of permanent IDPs	47	0.8
Number of temporary IDPs	144	2.4
Number of families still outside Afghanistan	598	9.8
Number of families in Afghanistan not yet returned to their village	723	11.8

Table 2 : Years of departures and return of refugees

Years of departure and return	Number of villages where the majority of people left or return at that date	Percentage/total number of villages
Departures:		
Never	9	6.7
1979-80	91	67.9
1981-82	32	23.9
1983-84	2	1.5
Returns:		
Not yet	114	85
1986-92	5	3.7
1993-954	11	8.3
1995-96	4	3

Table 3: Location of the refugees and IDPs outside and inside Afghanistan

Location	Number of villages with refugees mainly located in the town of the countries mentionned below	%/ total number of villages
Pakistan:		
Nobody	92	68.7
Karachi	2	1.5
Quetta	39	29.1
Para Chenar	1	0.7
Iran:		
Nobody	26	19.4
Asfahan	3	2.2
Bandar Abas	1	0.7
Kerman	1	0.7
Mashad	50	37.4
Qoum	2	1.5
Teheran	51	38.1
Afghanistan		
Nobody	10	7.5
Kabul	121	90.3
Mazar	2	1.5
Behsud	1	0.7

II Agriculture

Table 4: Means of production before the war and now

Means of production	Total for all the villages
Before the war:	
Number of jeribs irrigated before the war	10612.2
Average number of irrigated jeribs per family before the war	2.8
Number of jeribs rainfed before the war	8623.7
Average number of rainfed jeribs per family before the war	2.3
In November 1996	
Number of jeribs irrigated	8926
Average number of irrigated jeribs per family	1.9
Number of jeribs rainfed	8313.7
Average number of rainfed jeribs per family	1.7
Number of pair of oxen	1173
Average number of pair of oxen per family	0.2
Number of tractors	1
Number of threshers	0
Number of seed cleaners	0

Table 5: Land ownership

Villages where:	Number of villages	% / total number of villages
All the villagers where owner before the war	107	79.8
The proportion of land less people is less than before the war	1	0.7
The proportion of land less people is more than before the war	0	0
The proportion of land less people is the same as before the war	24	17.9
There was no land less people in November 1996	109	81.4

Table 6 : Cereals cultivated before the war and now

Cereals	**% of villages before the war**			**% of villages now**		
	First cereal	Second cereal	Third cereal	First cereal	Second cereal	Third cereal
Wheat	**100**	0	0	**100**	0	0
Barley	0	**100**	0	0	**97.8**	0
Maize	0	0	0	0	0	0
No other cereal	0	0	100	0	2.2	100
% villages with 1, 2 or 3 cereals	**100**	**100**	**0**	**100**	**97.8**	**0**

Table 7 : Legumes cultivated before the war and now

Legumes	**% of villages before the war**			**% of villages now**		
	First legume	Second legume	Third legume	First legume	Second legume	Third legume
Beans	0	0	0	0	0	0
Broad beans	6.7	1.5	7.5	3.7	1.5	2.2
Peas	16.4	**63.4**	15.6	13.4	**53.7**	**10.5**
Shakhal	**72.3**	11.9	7.5	**76.2**	6.7	3.7
Calul	3.7	11.2	9	3.7	9	7.5
Lentil	0	7.5	**23.1**	0	9.7	9.7
Mung beans	0	0	0	0	0	0
Gram	0	0	0	0	0	0.7
No other legume	0.7	4.5	37.3	3	19.4	65.7
% villages with 1, 2 or 3 legumes	**99.3**	**95.5**	**62.7**	**97**	**80.6**	**34.3**

Table 8 : Fodder crops cultivated before the war and now

Fodder crops	**% of villages before the war**			**% of villages now**		
	First F. Crop	Second F. crop	Third F. crop	First F. crop	Second F. crop	Third F.crop
Alfalfa	**100**	0	0	**100**	0	0
Clover	0	**28.4**	0	0	**11.9**	0
No other Fodder crops	0	71.6	100	0	90.8	100
% villages with 1, 2 or 3 fodder crops	**100**	**28.4**	**0**	**100**	**88.1**	**0**

Table 9 : Vegetables cultivated before the war and now

Vegetables	% of villages before the war			% of villages now		
	First veget.	Second veget.	Third veget.	First veget.	Second veget.	Third veget.
Carrot	0	**67.9**	6	0	**53.8**	6
Leek	0	0	2.2	0	0	0
Onion	0	2.2	3.7	0	2.2	4.5
Potatoes	**100**	0	0	**99.3**	0	0
Radish	0	0.7	0	0	0	0
Garlic	0	0		0	0	0.7
Turnip	0	8.3	**26.9**	0	10.4	**11.9**
No other vegetable	0.7	20.9	61.2	0	33.6	76.9
% villages with 1, 2 or 3 vegetables	**100**	**79.1**	**38.8**	**99.3**	**76.4**	**23.1**

Table 10 : Orchards cultivated before the war and now

Orchards	% of villages before the war			% of villages now		
	First orchard	Second orchard	Third orchard	First orchard	Second orchard	Third orchard
Apple	**0.7**	0	0	**11.2**	0	0
Apricot	0	0	0	0	0	0
Cherry	0	0	0	0	0	0
Plum	0	0	0	0	0	0
Walnut	0	0	0	0	0	0
No other orchards	993	100	100	88.8	100	100
% villages with 1, 2 or 3 orchards	**0.7**	**0**	**0**	**11.2**	**0**	**0**

Table 11 : Other crops cultivated before the war and now

Other crops	% of villages before the war			% of villages now		
	First oth. Crop	Second oth. Crop	Third oth. Crop	First oth. crop	Second oth. crop	Third oth. crop
No other crops	100	100	100	100	100	100
% villages with 1, 2 or 3 other crops	**0**	**0**	**0**	**0**	**0**	**0**

III Livestock

Table 12: Animal census

	Total for Markaz e Behsud (heads)
Horses	33
Donkeys	4164
Cows	2287
Sheep	25439
Goats	5180
Poultry	13416
% more animal before the war	20.5
% villages with more animals before the war than now	98.5

Table 13: Animal ownership

	% or average for Markaz e Behsud
Animal owners now	99.7
Average number of horses/family	0.007
Average number of donkeys/family	0.86
Average number of cows/family	0.47
Average number of sheep/ family	5.29
Average number of goats/family	1.07
Average number of poultry/family	2.79

Table 14 : Ranking of livestock problems

Problems	% of villages				Ranking
	Priorities n°1	Priorities n°2	Priorities n°3	Priorities n°4	
Breeding	0	5.2	**64.2**	30.6	**3**
Diseases	**79.9**	20.1	0	0	**1**
Housing	0	0	31.3	**68.7**	**4**
Nutrition	20.1	**74.7**	4.5	0.7	**2**

Table 15: Grazing area

	% or average for Markaz e Behsud
Villages with a grazing area	100
Average distance from the grazing area	43 mn
Villages with a daily grazing area	100
Villages with a summer grazing area	0
Villages with a water point in the grazing area	18.6

IV Infrastructures, rehabilitation and construction needs

Table 16: Existing infrastructures

Infrastructures	Total for Markaz e Behsud
Human clinics	2
Schools	11
Wells	667
Water supply	0
Houses	3268
Governmental offices	0

Table 17: Condition of the infrastructures

Infrastructures	Total number in Markaz e Behsud		
	Unaffected	Damaged	Destroyed
Human clinics	2	0	0
Houses	3082	183	3
Schools	9	2	0
Water supply	0	0	0
Wells	428	234	5

Table 18: Construction and reconstruction priorities

Problems	% of villages					Ranking
	Priorities n°1	Priorities n°2	Priorities n°3	Priorities n° 4	Priorities n°5	
Houses	**53**	0.7	0	0	0	**1**
Human clinic	0	0	0	0	0	
Wells	14.9	**35.7**	1.5	0	0	**2**
Schools	3.7	1.5	0	0	0	**3**
Water supply	0	0	0	0	0	
No problems	28.4	62.1	98.5	0	0	

Table 19: Irrigation infrastructure before the war

Irrigation infrastructures	% for all the villages of Markaz e Behsud
Villages with karezes	27.6
Villages with canals	30.5
Villages with springs	94
Villages with nawurs	91.8

Table 20: Irrigation infrastructures needs for rehabilitation

Needs for rehabilitation	Number of villages of Markaz e Behsud	% / all the villages of Markaz e Behsud
Inventory of the irrigation problems of the villages:		
Reconstruction of water intake	20	14.9
Reconstruction of other canal structure	18	13.4
Reconstruction of nawur	119	**88.8**
Reconstruction of Kareze	32	**23.9**
Main irrigation problem in the village		
Reconstruction of water intake	14	**10.4**
Reconstruction of other canal structure	8	6
Reconstruction of nawur	108	**80.6**
Reconstruction of Kareze	0	0
Reconstruction of nothing	4	3

Table 21: Inventory and condition of the roads

	Number of villages	% for Markaz e Behsud
Villages with a 2x2 road	5	3.7
Villages with a 4x4 road	113	84.3
Villages with a mule road	16	11.9
Villages with a road in poor condition	16	11.9
Villages with a road in fairly good condition	118	88.1

Table 22: Main request of the villages

Request of the villages	Number of village	% Markaz e Behsud
Animal clinic	18	13.4
Human clinic	10	7.5
Rehabilitation of intake	10	7.5
Rehabilitation of kareze	16	11.9
Rehabilitation of nawur	6	4.5
Rehabilitation of springs	34	**25.4**
Road construction	5	3.7
School	22	**16.4**
Agriculture program	13	9.7

Table 23 : Presence and activities of the NGOs

Names of the NGOs	Activities	% of villages concerned by the help
MADERA	Agriculture program	18.6
AVICEN	Health	51.5

Sub-district :Meher Khana

Number of villages surveyed: 140
Number of villages not surveyed: 0
Approximate area of the district: 661.5 km2
Date of survey: October-November 1996

Table n°1 : The differences in land lost between the sub-districts.

Sub-districts	Loss of irrigated land (%)	Loss of rainfed land (%)
Hesa e Awal	**25.8**	5.5
Day Mirdad	19.4	**20.4**
Quli Khish	**1.1**	6.2
Markaz e Behsud	15.8	**3.6**
Tagab	17	6
Meher Khana	**35.9**	**23.3**
Khuna Qala	19.3	8.1
Helmand		

According to the results of the survey, we cannot say for certain that there is a correlation between the number of refugees and IDPs still outside and the reduction of the cultivated land. Quli Khish for instance has the least reduction of cultivated land with the highest percentage of refugees and IDPs (39.4%). In such cases the loss of land can be linked to the erosion of the land or the destruction of the irrigation network during the war due to a lack of maintenance.

With the increase of population and the loss of cultivated land, the average land irrigated and rainfed available per family has decreased dangerously from 2.61 and 1.91 jeribs per family before the war to 1.7 and 1.26 jeribs per family in November 1996 for the whole area. Furthermore, if the refugees and IDPs come back it will be worse.
The situation is already dramatic in some sub-districts like Quli khish where the average number of jeribs available per family is already below 1.
However this analysis does not take into account the structures of land ownership. As a rule, some people have more land than others .
Before the war, the percentage of villages without landless people was higher than 67% for the surveyed area. It has slightly decreased to 65.5% in November 1996. On the other hand the proportion of landless people has reduced by 12.7% compared to before the war in the villages concerned.

3.2 Animal power and machinery (See annexes pages : 4)
The total number of pairs of oxen for Behsud I and II is equal to 6001.5 an average of 0.2 pairs per family and 0.12 per jerib irrigated (the rainfed area is rarely ploughed with oxen). Considering that the average daily capacity of work for one pair of oxen is around one jerib, it makes a capacity of ploughing the 48108 jeribs of the whole area in 8 days. As the farmers have maximum 2 weeks for ploughing in spring after the snow has melted, this number of oxen is potentially sufficient. If we change the scale at the level of the sub-district, we have a variation from 0.10 oxen per jerib (Helmand) to 0.24 oxen per jerib (Meher Khana) which makes a capacity of ploughing the total irrigated land of the sub-district in 9.7 days to 4 days.
Even if they are less effective, we have to consider that the donkeys are also often used for ploughing in this region.

RECONNAISSANCE SURVEY IN WARDAK AND BAMIAN PROVINCES

PART I : Wardak province
Behsud I and Behsud II districts

MADERA, SOLIDARITES
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Background

This survey has been conducted by MADERA and SOLIDARITES at the end of 1996. Its aim was to provide a general overview of the situation regarding agriculture, livestock, infrastructure and demography and to assess the main needs of the population in these different sectors.

More than 1100 villages at the total were surveyed in Wardak and Bamian province through a methodology described afterwards and a database was created on Microsoft access for the data analysis.

As the survey is not a real census, the data presented in this document have to be considered as tendencies. Nevertheless, it is precise enough to understand the evolution and the differences between the districts or sub-districts.

This survey shows a situation without any explanations. It is a large scale analysis that will hopefully help the agencies and the local authorities to have a general overview of the region. It is a first stage before changing the scale and going deeper into the diagnosis.

This report is the first part of the analysis of the survey. A second report will be soon published for the area of Jalrez and Bamian.
A brief analysis of ten pages will introduce a summary of the datas at the level of the districts and sub-districts. It is not possible to present all the data right down to the level of the village. However this information is available on a database, which can be accessed though both the MADERA office in Jalalabad and the SOLIDARITES office in Kabul.

Methodology